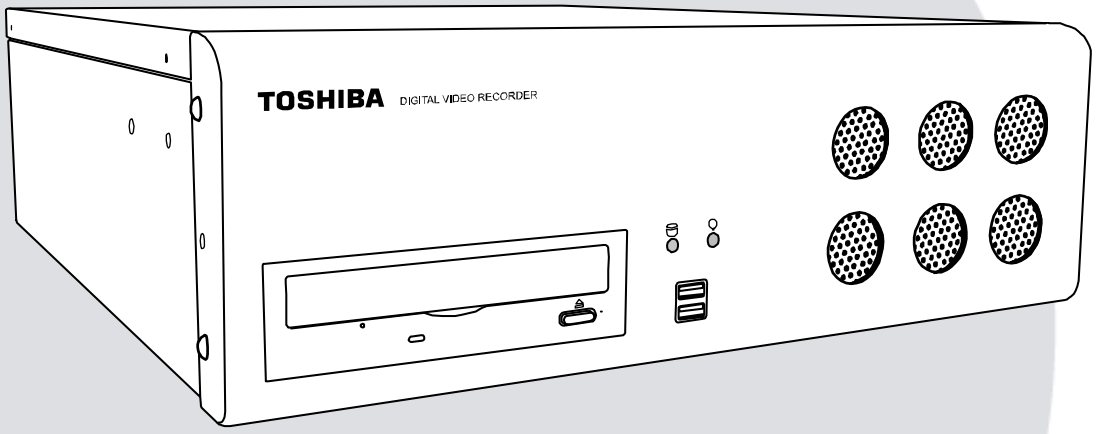
surveillix

XVR
Digital Video Recorder

User Manual

model no. XVR16-120-X
XVR16-60-X
XVR4-120-X



Please carefully read these instructions before using this product.
Save this manual for future use.

TOSHIBA

27812AC

Surveillix™ XVR
User Guide

Manual Edition 27812AC – FEBRUARY 2007

Printed in USA

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The following words and symbols mark special messages throughout this guide:

WARNING: Text set off in this manner indicates that failure to follow directions could result in bodily harm or loss of life.

CAUTION: Text set off in this manner indicates that failure to follow directions could result in damage to equipment or loss of information.

LIMITED WARRANTY
DIGITAL VIDEO RECORDER

The Imaging Systems Division of Toshiba America Information Systems, Inc. ("ISD") makes the following limited warranties. These limited warranties extend to the Original End-User ("You[r]").

Limited Two (2) Year Warranty of Labor and Parts

The Imaging Systems Division of Toshiba America Information Systems warrants this product and parts against defects in material or workmanship for a period of two years from the date of original retail purchase by the end-user. During this period, ISD will repair or replace a defective product or part with a new or refurbished item. The user must deliver the entire product to the Surveillix DVR Repair Facility. The user is responsible for all transportation and insurance charges for the product to the DVR Repair Facility. ISD reserves the right to substitute Factory Refurbished Parts and / or Factory Refurbished Product in place of those in need of repair.

Step-by-step Procedures - How to Obtain Warranty Service
[1] Verify operation of the unit by checking the instruction manual and web site for the latest updates at

www.toshiba.com/taisisd

[2] If there is a defect in material or workmanship, contact the Surveillix DVR Support Center at (877) 855-1349 [877-1-FIX] to speak to a technical support representative and schedule service.

[3] Arrange for delivery of the product to the Surveillix DVR Repair Facility. Products must be insured and securely packed, preferably in the original shipping carton. A letter explaining the defect and a copy of the bill of sale or other proof of purchase must be enclosed with a complete return street address and daytime telephone number. The Tracking Number should also be indicated on your documents. Charges for transportation and insurance must be prepaid by the end-user.

Critical Use Disclaimer
The product is not designed for any “critical applications.” “Critical applications” means life support systems, exhaust or smoke extraction applications, medical applications, commercial aviation, mass transit applications, military applications, homeland security applications, nuclear facilities or systems or any other applications where product failure could lead to injury to persons or loss of life or catastrophic property damage. Accordingly, Toshiba disclaims any and all liability arising out of the use of the product in any critical applications.

Your Responsibilities
The above warranty is subject to the following conditions:
[1] You must retain the bill of sale or provide other proof of purchase.
[2] You must schedule service within thirty days after you discover a defective product or part.
[3] All warranty servicing of this product must be made by the Surveillix DVR Repair Facility.
[4] The warranty extends to defects in material or workmanship as limited above, and not to any products or parts that have been lost or discarded by user. The warranty does not cover damage caused by misuse, accident, improper installation, improper maintenance, or use in violation of instructions furnished by ISD. The warranty does not extend to units which have been altered or modified without authorization of ISD, or to damage to products or parts thereof which have had the serial number removed, altered defaced or rendered illegible.

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No person, agent, distributor, dealer, service station or company is authorized to change, modify or extend the terms of these warranties in any manner whatsoever. The time within which an action must be commenced to enforce any obligation of ISD arising under this warranty or under any statute, or law of the United States or any state thereof, is hereby limited to one year from the date you discover or should have discovered, the defect. This limitation does not apply to implied warranties arising under state law. Some states do not permit limitation of the time within which you may bring an action beyond the limits provided by state law so the above provision may not apply to user. This warranty gives the user specific legal rights, and user may also have other rights, which may vary from state to state.

TOSHIBA AMERICA INFORMATION SYSTEMS, INC.
Imaging Systems Division

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TOSHIBA

IMPORTANT SAFEGUARDS

1. **Read Owner's Manual** – After unpacking this product, read the owner's manual carefully, and follow all the operating and other instruction
2. **Power Sources** – This product should be operated only from the type of power source indicated on the label. If not sure of the type of power supply to your home or business, consult product dealer or local power company
3. **Ventilation** – Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the product and to protect it from overheating, and these openings must not be blocked or covered. The product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.
4. **Heat** – The product should be situated away from heat sources such as radiators, heat registers, stoves, or other products that produce heat.
5. **Water and Moisture** – Do not use this product near water. Do not exceed the humidity specifications for the product as detailed in the Appendix section in this manual
6. **Cleaning** – Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
7. **Power Cord Protection** – Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the product.
8. **Overloading** – Do not overload wall outlets, extension cords, or integral convenience receptacles as this can result in a risk of fire or electrical shock.
9. **Lightning** – For added protection for this product during storm, or when it is left unattended and unused for long periods, unplug it from the wall outlet. This will prevent damage to the product due to lightning and power line surges.
10. **Object and Liquid Entry Points** – Never insert foreign objects into the XVR unit, other than the media types approved by Toshiba, as they may touch dangerous voltage points or short-out parts that could result in a fire or electrical shock. Never spill liquid of any kind on the product.
11. **Accessories** – Do not place this product on an unstable cart, stand, tripod, bracket, or table. The product may fall, causing serious personal injury and serious damage to the product.
12. **Disc Tray –** Keep fingers well clear of the disc tray as it is closing. Neglecting to do so may cause serious personal injury.
13. **Burden –** Do not place a heavy object on or step on the product. The object may fall, causing serious personal injury and serious damage to the product.
14. **Disc** – Do not use a cracked, deformed, or repaired disc. These discs are easily broken and may cause serious personal injury and product malfunction.

IMPORTANT SAFEGUARDS, continued

15. **Damage Requiring Service –** Unplug the unit from the outlet and refer servicing to qualified service personnel under the following conditions:

    When the power-supply cord or plug is damaged.

    If liquid has been spilled, or objects have fallen into the unit.

    If the unit has been exposed to rain or water.

    If the unit does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the unit to its normal operation.

    If the unit has been dropped or the enclosure has been damaged.

    When the unit exhibits a distinct change in performance – this indicates a need for service.

16. **Servicing –** Do not attempt to service this product as opening or removing covers may expose the user to dangerous voltage or other hazards. Refer all servicing to qualified personnel.

17. **Replacement Parts –** When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock or other hazards.

18. **Safety Check –** Upon completion of any service or repairs to this unit, ask the service technician to perform safety checks to determine that the unit is in proper operating condition.

NOTES ON HANDLING

Please retain the original shipping carton and/or packing materials supplied with this product. To ensure the integrity of this product when shipping or moving, repackage the unit as it was originally received from the manufacturer.

Do not use volatile liquids, such as aerosol spray, near this product. Do not leave rubber or plastic objects in contact with this product for extended periods of time. Rubber or plastic objects left in contact with this product for extended periods of time will leave marks on the finish.

The top and rear panels of the unit may become warm after long periods of use. This is not a malfunction.

NOTES ON LOCATING

Place this unit on a level surface. Do not use it on a shaky or unstable surface such as a wobbling table or inclined stand.

If this unit is placed next to a TV, radio, or VCR, the playback picture may become poor and the sound may be distorted. If this happens, place the XVR unit away from the TV, radio, or VCR.

NOTES ON CLEANING

Use a soft dry cloth for cleaning.

For stubborn dirt, soak the cloth in a weak detergent solution, wring well and wipe. Use a dry cloth to wipe it dry. Do not use any type of solvent, such as thinner and benzene, as they may damage the surface of the XVR unit.

If using a chemical saturated cloth to clean the unit, follow that product's instructions.

NOTES ON MAINTENANCE

This XVR unit is designed to last for long periods of time. To keep the XVR unit always operational we recommend regular inspection maintenance (cleaning parts or replacement). For details, contact the nearest dealer.

NOTES ON MOISTURE CONDENSATION

Moisture condensation damages the XVR unit. Read the following information carefully.

Moisture condensation occurs during the following cases:

When this product is brought directly from a cool location to a warm location.

When this product is moved to a hot and humid location from a cool location.

When this product is moved to a cool and humid location from a warm location.

When this product is used in a room where the temperature fluctuates.

When this product is used near an air-conditioning unit vent

When this product is used in a humid location.

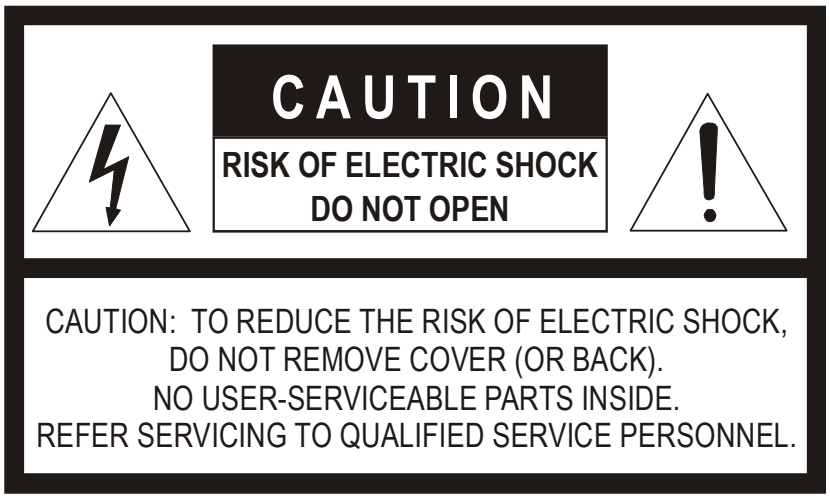
Do not use the XVR unit when moisture condensation may occur.

If the XVR unit is used in such a situation, it may damage discs and internal parts. Remove any DVD discs, connect the power cord of the XVR unit to the wall outlet, turn on the XVR unit, and leave it for two to three hours. After two to three hours, the XVR unit will warm up and evaporate any moisture. Keep the XVR unit connected to the wall and moisture will seldom occur.

WARNING

TO REDUCE THE RISK OF ELECTRICAL SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.
DANGEROUS HIGH VOLTAGES ARE PRESENT INSIDE THE ENCLOSURE.
DO NOT OPEN THE CABINET.
REFER SERVICING TO QUALIFIED PERSONNEL ONLY.

CAUTION


CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN
CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

EXPLANATION OF GRAPHICAL SYMBOLS

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of un-insulated “dangerous voltage” within the product’s enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instruction in the literature accompanying the product.

RACK MOUNT INSTRUCTIONS

Elevated Operating Ambient – If installed in a closed or multi-unit rack assembly, the operating ambient temperature of the rack environment may be greater than room ambient. Therefore, consideration should be given to installing the equipment in an environment compatible with the maximum ambient temperature (Tma) specified by the manufacturer.

Reduced Air Flow – Installation of the equipment in a rack should be such that the amount of airflow required for safe operation of the equipment is not compromised.

Mechanical Loading – Mounting of the equipment in the rack should be such that a hazardous condition is not achieved due to uneven mechanical loading.

Circuit Overloading – Consideration should be given to the connection of the equipment to the supply circuit and the effect that overloading of the circuits might have on over current protection and supply wiring. Appropriate consideration of equipment nameplate ratings should be used when addressing this concern.

Grounding – Grounding of rack-mounted equipment should be maintained. Particular attention should be given to supply connections other than direct connections to the branch circuit (e.g. use of power strips).

FCC STATEMENT

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

UL NOTICE

Underwriters Laboratories Inc. has not tested the performance or reliability of the security or signaling aspects of this product. UL has only tested for fire, shock and casualty hazards as outlined in UL's Standard for Safety UL 60950-1. UL Certification does not cover the performance or reliability of the security or signaling aspects if this product. UL MAKES NO REPRESENTATIONS, WARRANTIES OR CERTIFICATIONS WHATSOEVER REGARDING THE PERFORMANCE OR RELIABILITY OF ANY SECURITY OR SIGNALING RELATED FUNCTIONS OF THIS PRODUCT.

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PREFACE

ABOUT THIS GUIDE

This manual is a setup and maintenance guide that can be used for reference when setting up the XVR unit and for troubleshooting when a problem occurs. Only authorized personnel should attempt to repair this unit.

Toshiba reserves the right to make changes to the XVR units represented by this manual without notice.

The following text and symbols mark special messages throughout this guide:

NOTE: Text set off in this manner indicates topics of interests that can help the user understand the product better.

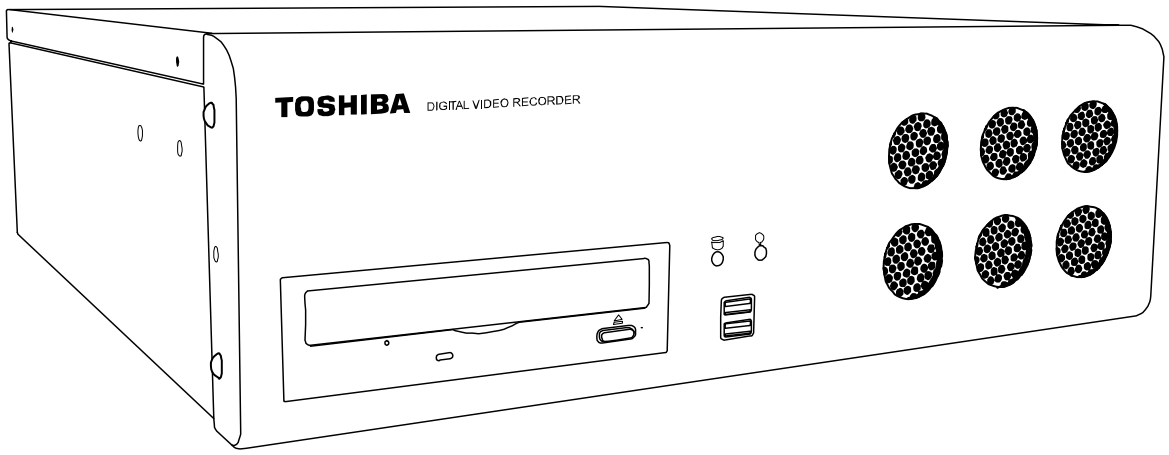
TIP: Text set off in this manner indicates topics and points of interests that can be helpful when using or settings up the XVR unit.

TECHNICIAN NOTES

	WARNING: Only authorized technicians trained by Toshiba should attempt to repair this XVR unit. All troubleshooting and repair procedures that may be shown are for reference and minor repair only. Because of the complexity of the individual components and subassemblies, no one should attempt to make repairs at the component level or to make modifications to any printed wiring board. Improper repairs can create a safety hazard. And any indications of component replacement or printed wiring board modifications may void any warranty
	WARNING: To reduce the risk of electrical shock or damage to the equipment: • Do not disable the power grounding plug. The grounding plug is an important safety feature. • Plug the power cord into a grounded (earthed) electrical outlet that is easily accessible at all times. • Disconnect the power from the computer by unplugging the power cord either from the electrical outlet or the computer.
	CAUTION: To properly ventilate your system, you must provide at least 3 inches (7.6 cm) of clearance at the front and back of the XVR unit.

INTRODUCTION

PRODUCT DESCRIPTION



A Surveillix XVR is simply a server that performs as a High Definition Digital Recorder. By utilizing the many features of a computer, including processing power, storage capacity, graphics compression, and security features, the XVR unit is more powerful than the analog recorders of the past.

The Surveillix XVR server software comes pre-configured for fast and seamless integration within your existing IT infrastructure. Designed around Microsoft® Windows® XP, the server software offers unparalleled stability, security, and ease of use. Accordingly, your security investment has never been easier to maintain. Multiple users may simultaneously connect through any network connection for instantaneous live viewing, digital search, and off site video storage. Users can also connect remotely through DSL, Cable Modems, ISDN, or 56K dial-up. This powerful software enables users to establish recording schedules, create motion detection zones, use PTZ controls, and configure alarm inputs and outputs for each of the system's cameras. With the latest advancements in the XVR Server Software, searching and indexing your video archive has never been easier. Video can now be found, viewed, and exported in a number of file formats with just a few clicks.

The Surveillix XVR is high performance security product ready to meet today’s security demands.

FEATURES

Toshiba's Surveillix XVRs include the following new features:

- Optimized and Designed for Microsoft® Windows XP Embedded®
- Supports up to 4 Relay Outputs on Alarm Activation
- Supports up to 16 Sensor Inputs for Alarm Control
- Remote System Operation & Configuration
- Supports Multiple Simultaneous Remote Connections
- PAN / TILT / ZOOM Controls
- Simultaneous Video Search, Playback and Backup
- Video Indexes for Easy Searching
- Multiple Levels of Security Access
- Up to 16 Looping Outputs
- Optional POS and ATM Support
- 1 Composite Output
- Up to 16 Camera Inputs
- Up to 2 Audio Inputs
- High Performance, Durable, Rack mount Case
- Output the Video to a NTSC/PAL Display
- Virtually Unlimited Storage Potential
- Digital Signature Support
- Continuous, Motion Detection, Alarm, Pre-Alarm, and Scheduled Recording Modes
- Hardware Watchdog
- 720x480 / 720x240 / 360x240 NTSC Recording Resolution
- 720x576 / 720x288 / 360x288 PAL Recording Resolution

CONTROLS AND CONNECTIONS

This chapter includes the following information:

- Input / Output Connector Locations
- Front Panel Controls and LEDs
- Rear Panel Connectors

SYSTEM SPECIFICATIONS

Surveillix™ state-of-the-art High Definition Digital Recorders are housed in a high performance and versatile 4U Rack-Mount case allowing easy storage of multiple XVRs for enterprise applications. Every Surveillix XVR unit comes equipped with the latest technology:

Intel® Pentium® IV Processor

10/100 Network Interface Card (NIC)

512 MB of System Memory

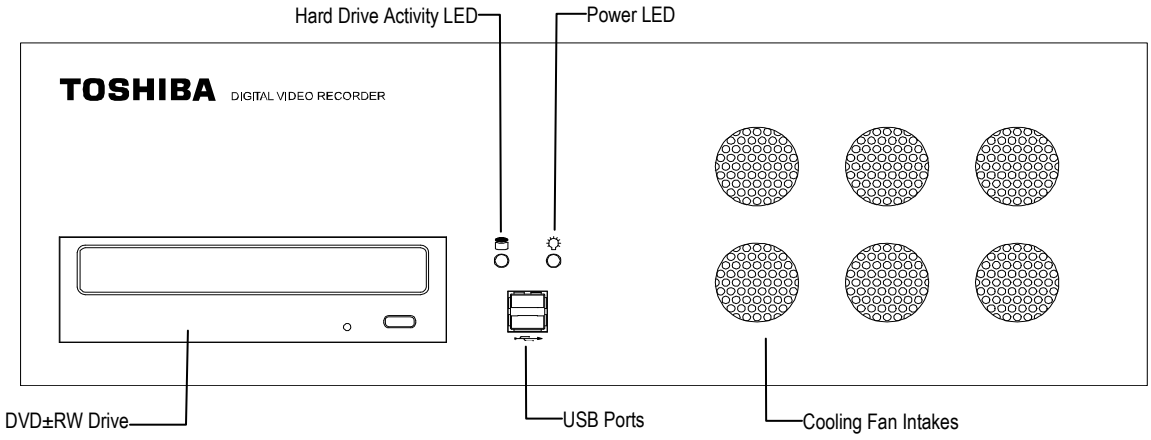
128 MB Video Card

DVD±RW Recorder

250 GB Video Storage Drive (minimum)

FRONT PANEL CONTROLS AND LEDS

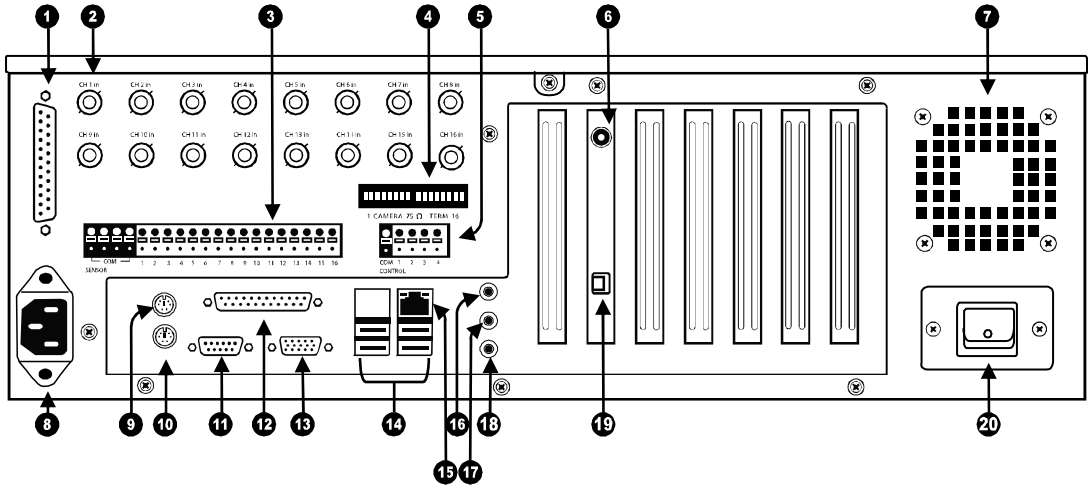
The front panel of the XVR unit contains the devices that will be commonly used for data removal, retrieval, and backup replacement. The most common components and buttons are shown below:



REAR PANEL CONNECTORS

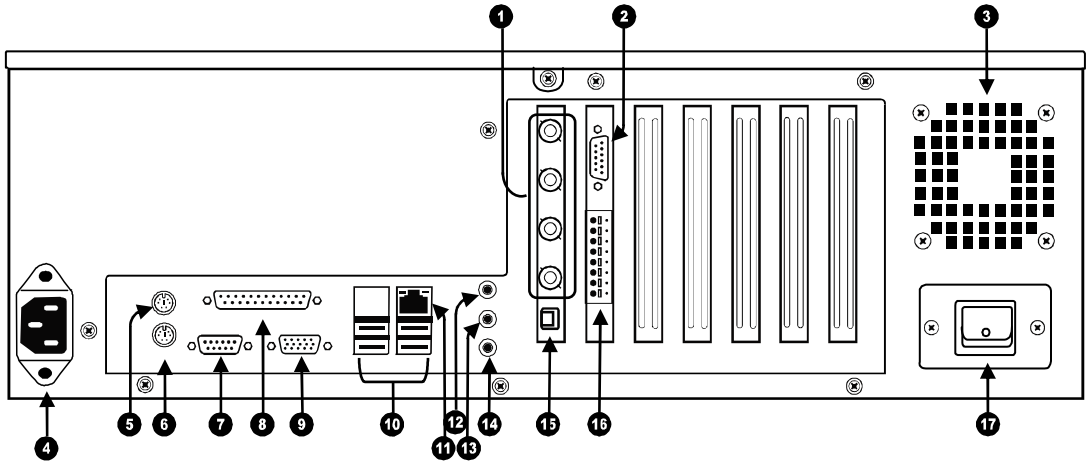
The rear panel of the XVR unit contains the connectors used to attach cameras, sensors, and relays to the XVR. Below are diagrams that outline the location and description of each connector:

16 Channel



1	Input for BNC Connector Cable	**11**	DB-9 Serial Input 1v
2	BNC Connectors for Video Input	**12**	LPT Parallel Printer Port
3	Sensor Inputs	**13**	DB-9 Serial Input 2
4	75 Ohm Looping Output Termination Switch	**14**	USB Ports
5	Control Alarm Outputs	**15**	RJ-45 Network Jack
6	RCA Video Out	**16**	Audio Line In – line level
7	Cooling Fan	**17**	Audio Speaker Out
8	IEEE AC Power Connector	**18**	Audio Microphone In (not used)
9	PS/2 Mouse Input	**19**	RS-485 Interface
10	PS/2 Keyboard Input	**20**	Power Switch

4 Channel



1	BNC Connectors for Video Input	**10**	USB Ports
2	Serial Input to connect Audio and Spot Monitor Cable	**11**	RJ-45 Network Jack
3	Cooling Fan	**12**	Audio Line In (not used)
4	IEEE AC Power Connector	**13**	Audio Speaker Out
5	PS/2 Mouse Input	**14**	Audio Microphone In (not used)
6	PS/2 Keyboard Input	**15**	RS-485 Interface
7	DB-9 Serial Input 1	**16**	Sensor Inputs / Relay Outputs
8	LPT Parallel Printer Port	**17**	Power Switch
9	DB-9 Serial Input 2		

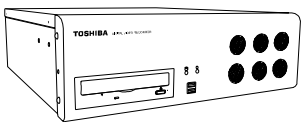
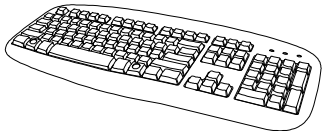
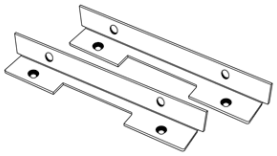
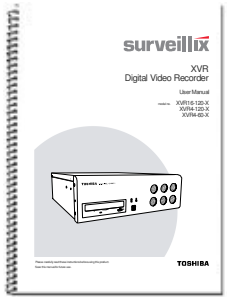
GETTING STARTED

This chapter includes the following information:

- Included Components
- Setting the XVR Hardware
- Optional Components

IDENTIFYING INCLUDED COMPONENTS

Surveillix™ XVRs come with a mouse, keyboard and selected software and cables. Identify the following components to make sure everything has been properly included with the new XVR unit. If any of the following items are missing, contact the dealer to arrange a replacement.

		
XVR Unit	**Mouse**	**Keyboard**
Repair Disc/ Software Disc	**Power Cable**	**PTZ Adapter**
		
BNC Connector Cable (16 Channel Only)	**Audio/Spot Monitor Cable (4 Channel Only)**	**Rack Mount Attachments with Screws**
		
XVR Key	**XVR Manual**	

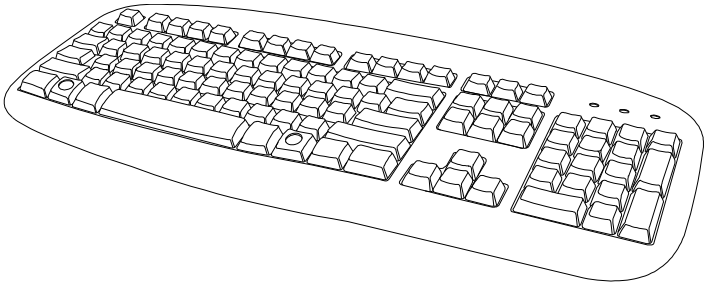
OPTIONAL COMPONENTS

To fully utilize the XVR unit's potential; several optional Surveillix components are listed below. Contact the dealer for more information.

1	**GB-NIC**	**Gigabit Network Card**
Increase data transfer rate with a faster network card		
2	**NP-FM56USB**	**56K External Modem**
This 56K modem allows the user to connect the XVR to a standard phone line. Using this modem, either connect the unit to the Internet or allow a direct XVR to computer connection.		
3	**PW-UPS**	**UPS Power Backup**
UPS Power Backups allow your XVR unit to remain fully functional even in the event of a power failure. UPS Power Backups also even the fluctuating power current out to provide a consistent, reliable power flow. This creates a stable environment for the XVR unit and reduces failure.		
4	**NP-4PKVM**	**4 Channel KVM Switch**
The 4 Channel KVM switch allows you to have multiple boxes (up to 4) using only one keyboard, mouse and monitor. You can simply switch between the XVR units using the keyboard.		
5	**PC-POS01**	**POS Interface**
6	**PC-ATM01**	**ATM Interface**
7	**P1550LA**	**15" LCD Monitor**
15" Flat screen monitor.		
8	**P1750LA**	**17" LCD Monitor**
17" Flat screen monitor.		
9	**P1950LA**	**19" LCD Monitor**
19" Flat Screen monitor		

KEYBOARD SETUP

To attach the keyboard to the XVR unit, plug the end of the Keyboard into the keyboard PS/2 Port located on the back of the machine. The keyboard PS/2 Port can be identified by the purple color. Refer to the Rear Panel Connectors diagram for more information.



KEYBOARD AND MOUSE SETUP

To attach the mouse to the XVR unit, plug the end of the mouse into the mouse PS/2 Port located on the back of the machine. The mouse PS/2 Port can be identified by the green color.

The mouse uses a cursor called a pointer. Pointers come in many different shapes but are most commonly shaped like an arrow.

The mouse has two buttons: a left button and a right button. Quickly pressing and releasing one of these buttons is called clicking. Sometimes you will need to double-click – or click the same button twice quickly.

In this manual:

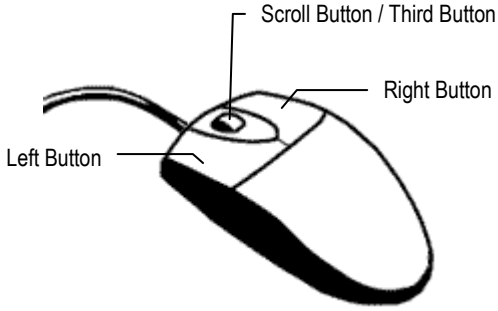
Click means to position the mouse cursor over an item and to single click the left button.

Right click means to position the mouse cursor over an item and to single click the right button.

Double-click means to position the mouse cursor over an item and to click the left button twice.

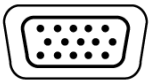
Select means to position the mouse cursor over a radio button, checkbox, or list item and click on it.

The scroll wheel in between the two buttons is used for added navigation functionality. By moving the wheel with index finger (scrolling), quickly move through multiple pages, lines, or windows. The wheel may also function as a third button allowing the user to quickly click or double-click an icon or a selected item



MONITOR SETUP

The XVR may have one or both of the following connections available for monitors which can be used individually or in tandem.



SVGA Output To VGA Monitor.

S-Video Output To TV/VCR.

Attach the monitor or monitors to the rear of the XVR unit using the cable supplied by the monitor manufacturer. Refer to the monitor manual for detailed information on how to setup and use it.

NOTE: The monitor must be capable of having a screen resolution of 1024 x 768 and display colors of at least 32 Bit

POWER SETUP

WARNING:
To reduce the risk of electrical shock or damage to the equipment:

Do not disable the power grounding plug.
The grounding plug is an important safety feature.

If the electrical plug you are using does not have a ground plug receptacle contact a licensed electrician to have it replaced with a grounded electrical outlet.

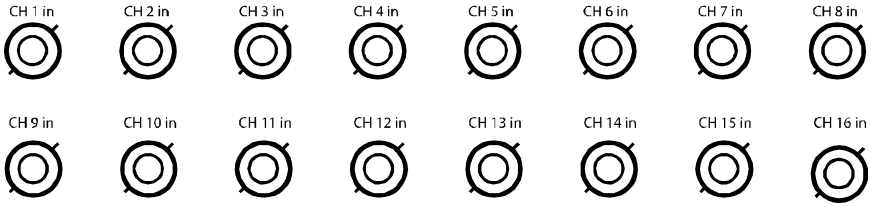
Plug the power cord into a grounded (earthed) electrical outlet that is easily accessible at all times.

Disconnect the power from the computer by unplugging the power cord either from the electrical outlet or the computer.

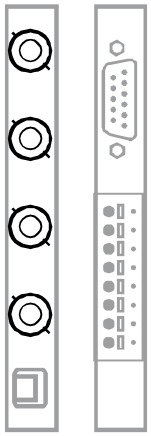
CONNECTING A VIDEO SOURCE TO THE XVR

There are different types of Video Sources that can be plugged into the XVR unit including DVD players, VHS players, and CCTV Cameras. The back of the XVR unit contains up to 16 video inputs depending on the XVR model. The connectors use the BNC standard.

16 Channel XVR



4-Channel XVR



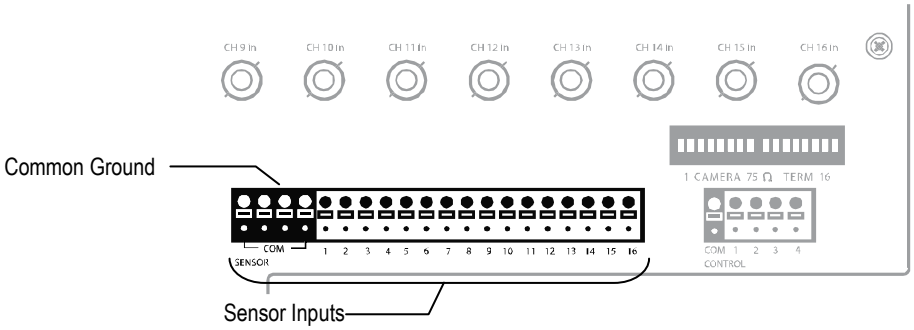
The video inputs are RG-53 BNC connectors. Plug one end into the video source (DVD, Camera, etc.) and plug the other end into the desired BNC input on the XVR unit.

CONNECTING SENSORS TO THE XVR

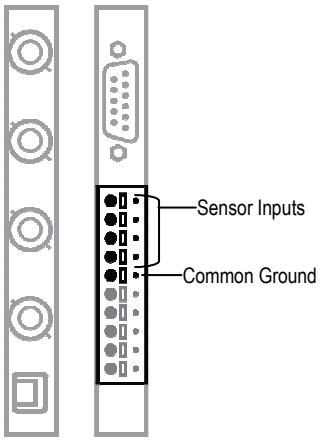
Each XVR unit may have up to 16 Sensor inputs. These inputs can be used with devices such as infrared devices, motion device, glass breakage alarms, door and window trips, and many more. The Sensors can be set to Normally Open or Normally Closed inside the software.

There are 4 Common Grounds (-) and 16 sensor inputs (+). There is no power supplied to the ports so an external power supply must be used if power is necessary.

16 Channel



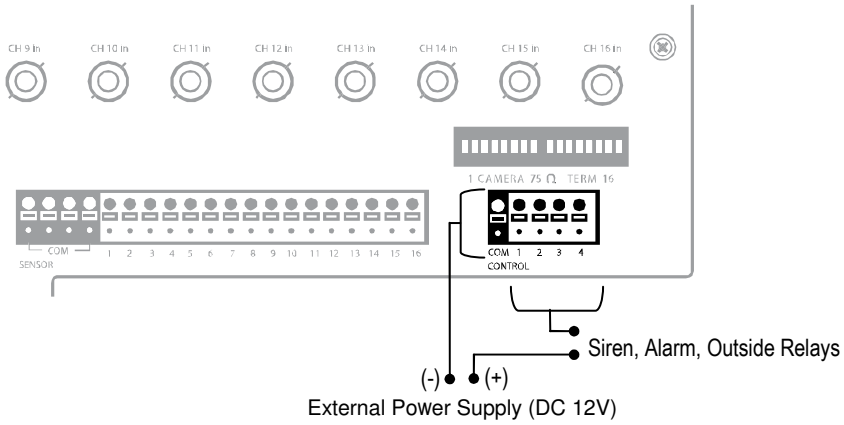
4 Channel



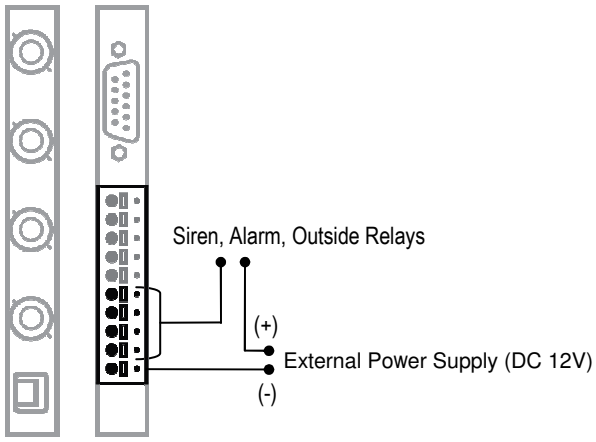
CONNECTING CONTROL OUTPUTS TO THE XVR

Each XVR unit may have up to 4 Control Outputs. These outputs can be used to trigger devices such as Sirens, Phone Dialers, Lights, and any other relay activated device. There is no power supplied to the ports. Use an external power supply if necessary.

16 Channel



4 Channel



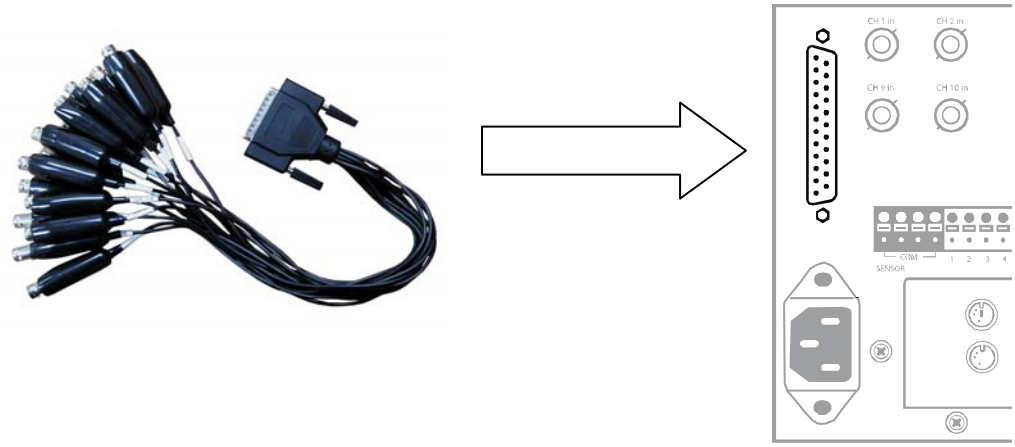
Use 12V, below 300mA. For controlling lights or other devices, use another external relay.

Maximum voltage is 24V AC @ 1 amp

Output uses a Form C Relay

LOOPING OUTPUTS

The 16 Channel XVR unit may have up to 16 Looping outputs. Depending on the destination of the outputs, each output may have to be terminated. The outputs are located on the BNC Connector Cable. Attach the cable to the input for the BNC Connector Cable highlighted below.

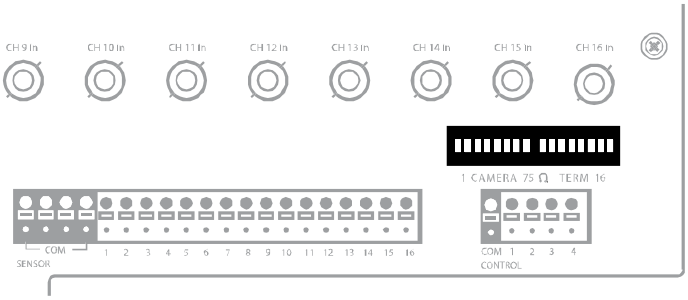


The Video inputs are RJ-59 BNC connectors. Make sure there is a video source connected to the input and then connect a cable to the Channel Out. The looping outs can be connected to video monitors or combined with adapters to connect to VCR's.

LOOPING OUTPUT TERMINATION

When terminating the outputs becomes necessary, the XVR unit has built in termination that allows you to select individual outputs to terminate individually. It is not always necessary to terminate the output when using it. It is dependant on the device with which you are connecting it to. As a rule, if the image appears distorted or virtually unviewable, it most likely needs to be terminated.

16 Channel



ON	Not connected to a monitor (Normal)
OFF	Connected to a monitor (Looped)

Always leave the dipswitch set to the ON position when the Looping Outputs are not used.

CONNECTING A PTZ CAMERA

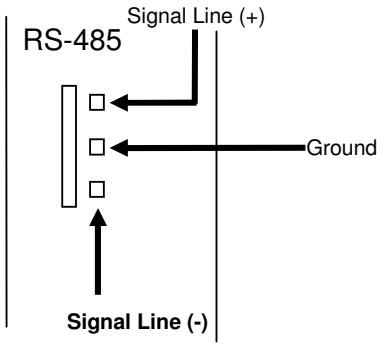
Setting up a PTZ Camera is simple. The XVR unit comes preassembled with an internal PTZ adapter. The cabling may be run up to 4,000 ft using 22 Gauge Twisted Pair.

It is important to understand how the PTZ connects to the XVR. The XVR outputs an RS-232 signal and converts in to an RS-422/485 signal which is then sent to the PTZ camera.

Attaching the RS-485 Adapter

1. Locate the PTZ adapter cable.
2. Connect the two wires of the PTZ adapter to the PTZ camera. The red wire on the adapter should connect to the RX+ on the PTZ and the brown wire should connect to the RX-.
3. Connect the other end of the adapter to the XVR unit as shown
4. Assign the PTZ camera an ID number that coincides with the number assigned to it by the XVR unit.

Example: If the camera is plugged into input number 5, set the PTZ unit to ID number 5.



TURNING ON THE XVR

1. Turn on the monitor and any external peripherals (ex. Printers, External Storage Devices, etc.) connected to the XVR unit.
2. Turn on the Power Switch located in the rear of the XVR unit.
3. The XVR will run a series of self-tests. After two or three minutes, a series of messages may be displayed as the various hardware and software subsystems are activated. Under normal circumstances, users should not be asked to respond to these messages. If asked to respond to the messages (adding a Printer, Monitor, etc for the first time) follow the instructions carefully.
4. Startup is complete when the Surveillix™ XVR software is finished loading and displays the main menu screen.

TURNING OFF THE XVR

1. Click the Exit Button on the main menu screen of the XVR software.
2. Select Power Off from the drop down menu, which appears in the Power Off prompt, and click OK.

The XVR unit may take several minutes to shut down completely.

CAUTION: Always be sure to follow the proper procedures when turning off the power to the XVR unit. NEVER disconnect the power to the XVR unit while it is still running or in the process of shutting down. Doing so can cause data loss, file corruption, system instability and hardware failure.

XVR BASICS

This chapter includes the following information:

- Exporting Settings
- Becoming familiar with the Display screen
- Defining Screen Divisions

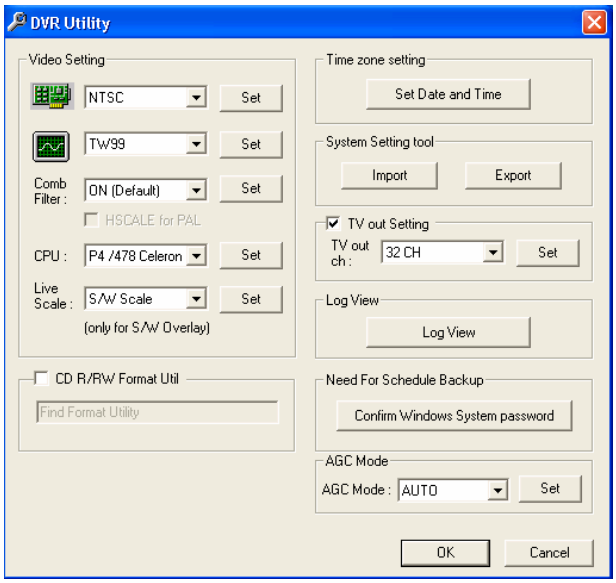
EXPORTING XVR SETTINGS

Exporting XVR settings can help configure multiple DVRs quickly or reconfigure a unit that has failed. Some things must be kept in mind when using this feature.

You cannot use this function on:

- XVRs that are different models.
- When upgrading from certain software versions. You cannot use this feature when upgrading from v1.x to v2.x

1. Exit to Windows by clicking the Exit Button on the Main Display Screen and selecting Restart in Windows Mode. (See the Display Screen section later in this chapter)
2. Click Start > Programs > Surveillix > VFormat
3. Click the Export Button in the System Settings tool section.



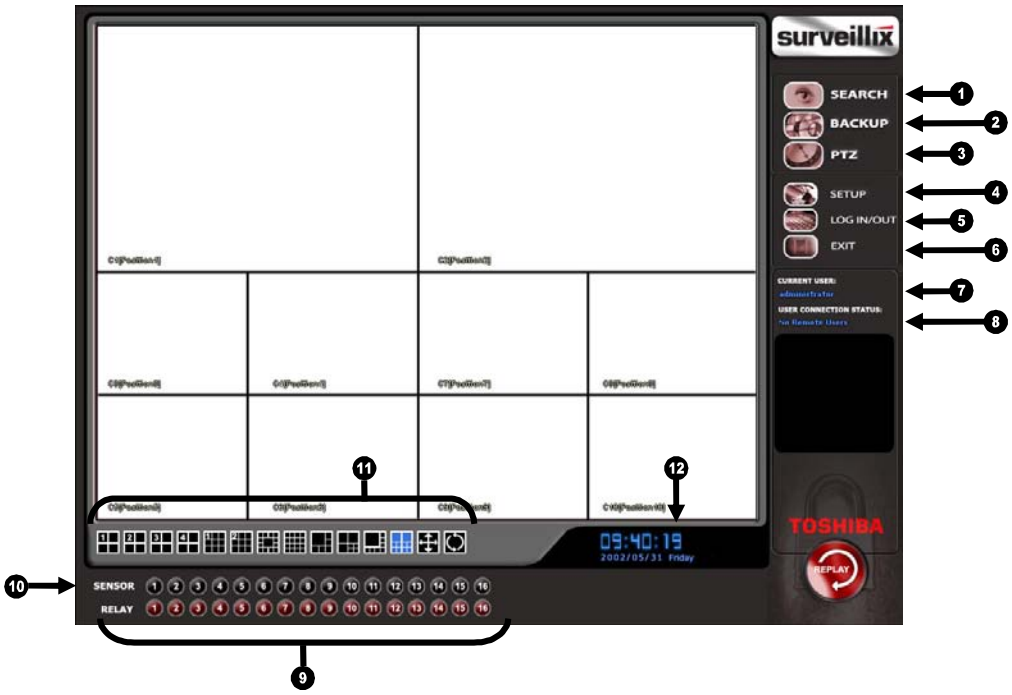
4. Select a location to save the settings file and click Save. The DVR Utility will export the XVR settings and automatically close.
5. Click the OK Button to close the VFormat Utility.

IMPORTING XVR SETTINGS

1. Exit to Windows by clicking the Exit Button on the Main Display Screen and selecting Restart in Windows Mode. (See the Display Screen section later in this chapter)
2. Click Start > Programs > Surveillix > VFormat
3. Click the Import Button in the System Settings Tool section.
4. Select the location of the settings file to import and click Open.
5. Click Yes to import the data file.
6. Click the OK Button to close the VFormat Utility.

DISPLAY SCREEN

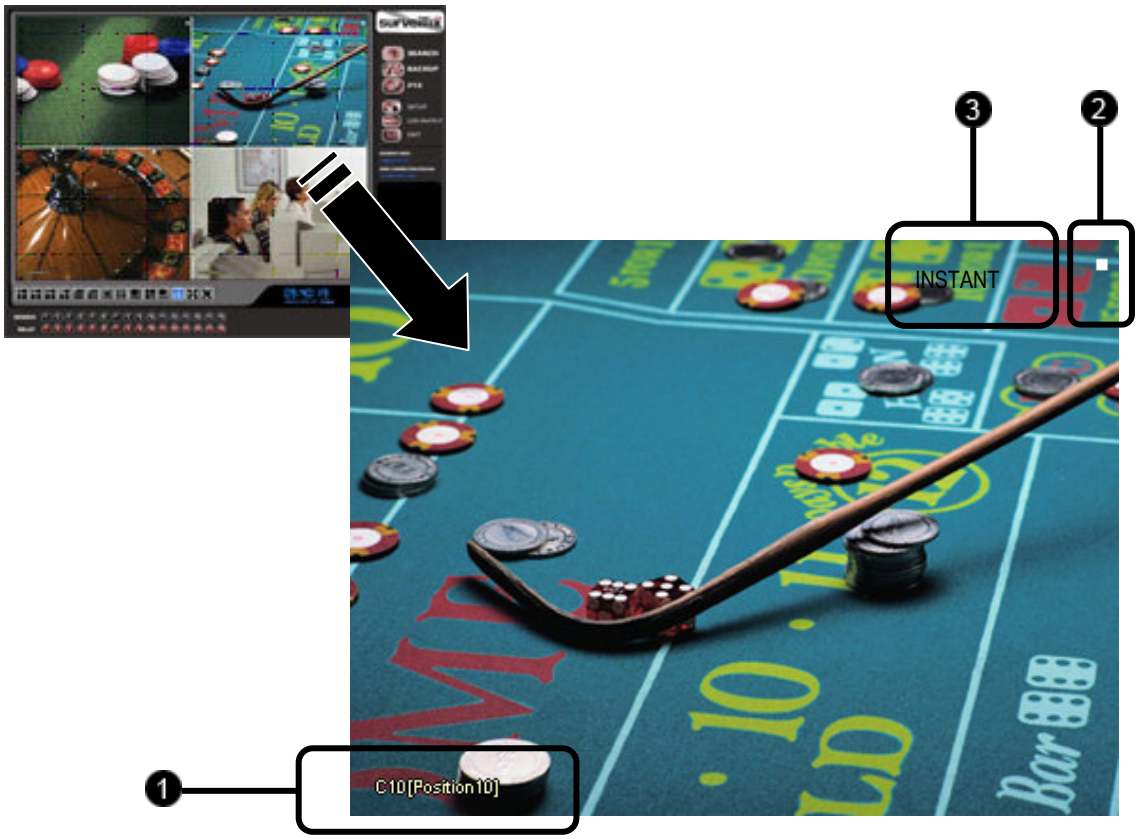
Each time the XVR is started, the program defaults to the Display screen. The following diagram outlines the buttons and features used on the Display screen. You should become familiar with these options as this is the screen that will be displayed the majority of the time.



1	**Search**	Opens the Video Search Display.
2	**Backup**	Displays the Backup Center Window.
3	**PTZ**	Opens the Pan / Tilt / Zoom Controller
4	**Setup**	Displays Setup Menu, from which all customizable settings can be edited.
5	**Login**	Allows you to login as a different user.
6	**Exit**	Displays several options, including Shut Down, Restart, and Restart in Windows Mode.
7	**Current User**	Displays the name of the user currently logged onto the XVR.
8	**Remote Client Status**	Displays users connected remotely to the XVR unit.
9	**Relay**	Fires the Output Relay.
10	**Sensor Status Bar**	Displays Alarm Status for each Sensor Inputs.
11	**Screen Division Buttons**	Allows the view of one or more sets of cameras at a time. They are organized in several different groups such as 1x1, 4x4, and 8x8.
12	**Date/Time**	Displays current date and time. This date and time is stamped onto the recorded video and is displayed whenever the video is played back.

CAMERA VIEW

The Camera status for each camera is displayed next to the Camera number (or name) on the Video Display Area. The following are



1	**Camera Number and Name**	Displays the camera number and the custom name given to the camera.
2	**Recording Status**	Displays the current recording status of the camera using symbols.
3	**Special Recording**	Displays text relating to the type of recording that is occurring.

RECORDING STATUS INDICATOR

The camera status for each camera is displayed in the upper right corner on the Video Display Area. The following are the different states for each camera:

	Recording	Displayed when the camera is currently being recorded to the XVR unit.
	Motion Detection	Displayed when a camera (set up for motion detection) detects motion.
	Display	Displayed when the camera is currently not being recorded to the XVR unit.

There are two types of XVR Special Recording. Text is displayed on the camera indicating what type of Special Recording is activated.

SENSOR Sensor is displayed when a sensor, associated with a given camera, is activated.

INSTANT Instant Recording is a manual activation of the recording for the selected camera. Regardless of the recording method, Instant Recording will start the camera recording and also flag the video for future searches using the Index Search feature. INSTANT is displayed when a user activates the instant recording option. Double Right-Click the video display to activate and deactivate the Instant Recording option.

SCREEN DIVISION MENU

The Screen Division Menu allows you to view cameras in groups such as two by two, three by three and four by four. The button options are shown below.

1st Four Cameras View – Displays cameras 1-4 in the Video Display Area. To return to a different Multi-Camera View, select a different Screen Division option from the Screen Division Menu.

2nd Four Cameras View – Displays cameras 5-8 in the Video Display Area. To return to a different Multi-Camera View, select a different Screen Division option from the Screen Division Menu.

3rd Four Cameras View – Displays cameras 9-12 in the Video Display Area. To return to a different Multi-Camera View, select a different Screen Division option from the Screen Division Menu.

4th Four Cameras View – Displays cameras 13-16 in the Video Display Area. To return to a different Multi-Camera View, select a different Screen Division option from the Screen Division Menu.

1st Nine Cameras View – Displays cameras 1-9 in the Video Display Area. To return to a different Multi-Camera View, select a different Screen Division option from the Screen Division Menu.

2nd Nine Camera View – Displays cameras 8-16 in the Video Display Area. To return to a different Multi-Camera View, select a different Screen Division option from the Screen Division Menu.

Multi-Camera View – Displays a group of cameras within the Video Display Area.

All Camera View – Displays all 16 cameras within the Video Display Area.

Multi-Camera View – Displays a group of cameras within the Video Display Area.

Multi-Camera View – Displays a group of cameras within the Video Display Area.

Full Screen – The Full Screen Option allows you to view the Video Display Area using the entire viewable area on the monitor. When this is selected, no menu options are visible. You can activate the Full Screen Option by clicking on the Full Screen Button within the Screen Division Menu. You can deactivate Full Screen mode by right clicking on the screen.

Auto Sequence – Sequences through the Screen Divisions sets. For example, selecting the 1A and then the Loop Button will sequence through 1A, 2A, 3A, 4A and then repeat. This option is not available for the 7, 10 and 13 screen divisions.

SETUP OPTIONS

This chapter includes the following information:

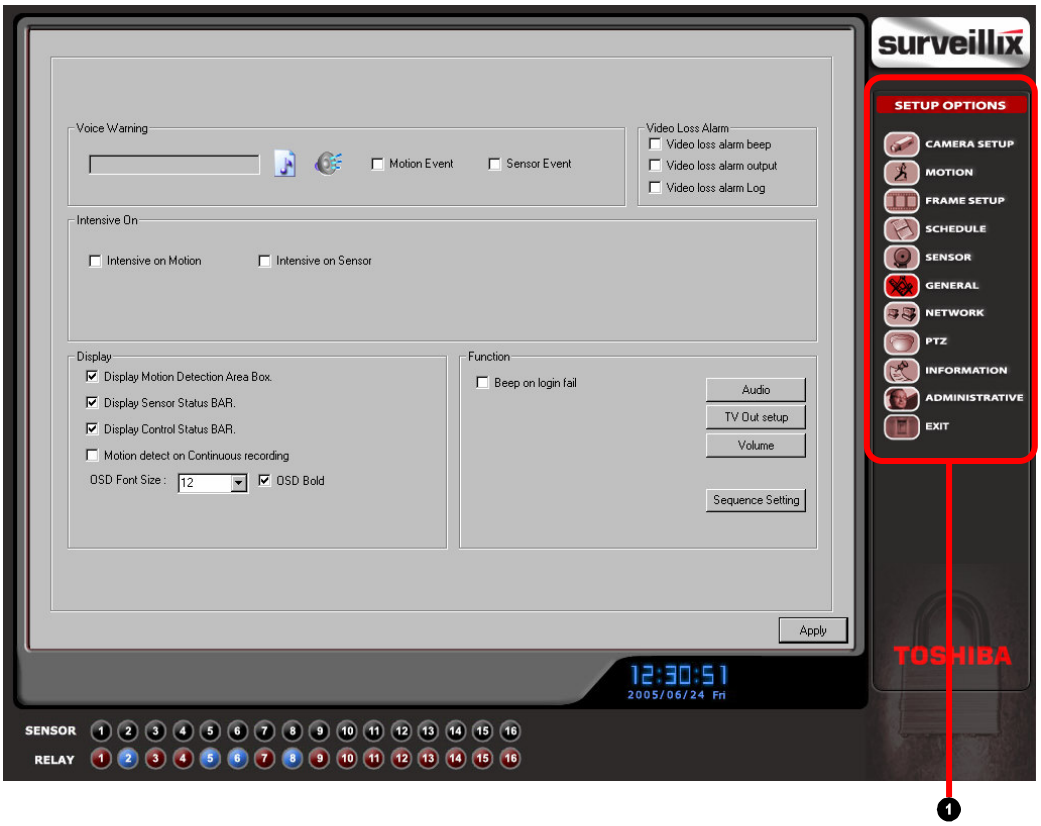
- Setup Overview
- Channels
- Color
- Schedule
- Speed
- Motion Detect
- Password
- Pan/Tilt
- Audio

SETUP OVERVIEW

The Setup options allow you to optimize your XVR unit by adjusting things like camera names, reboot schedules, recording schedules and more. It is extremely important that you setup your XVR correctly for several reasons.

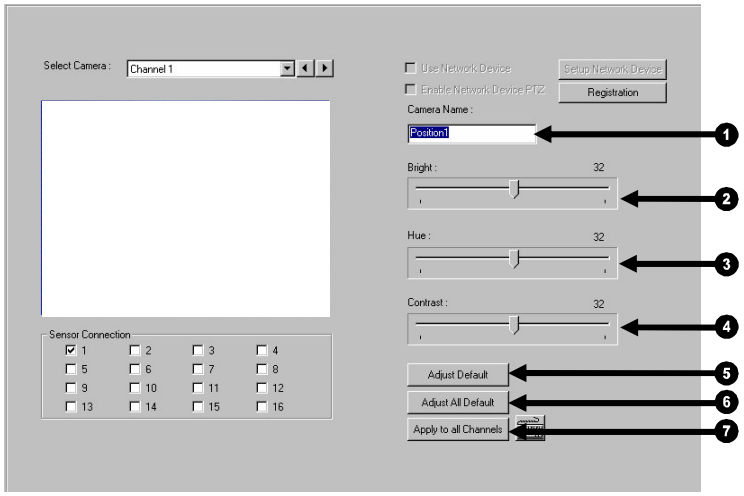
- **Recording Schedules** – By optimizing the recording schedule you can increase the amount of pertinent recorded video that is saved on the XVR and keep it longer. You can optimize the type of recording done by adding motion detection to this as well, again increasing the amount of useful video.
- **XVR Access** – By setting up the access passwords you can tightly control the types of access an individual may have. This ensures the security and integrity of the XVR unit.
- **Camera Naming** – By naming each camera you can easily identify the location and any other pertinent information that may be helpful simply by viewing it on the Video Display Area.
- **Adjusting Camera Color** – By adjusting each camera's color settings you can optimize the clarity and detail that is recorded.

SETUP SCREEN OVERVIEW



1	**Setup Options**	Toggle between different setup options

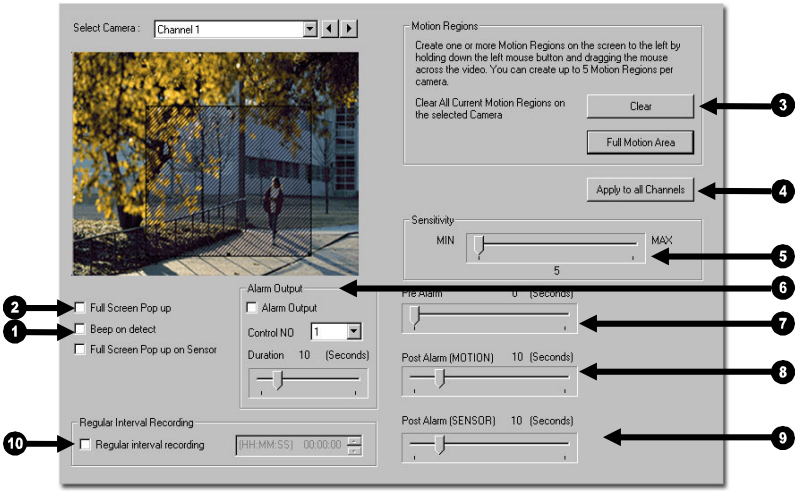
CAMERA SETUP



1	**Name**	Accepts a user defined name for the selected camera
2	**Bright**	Adjusts the Brightness of the selected camera.
3	**Hue**	Adjusts the Hue of the selected camera.
4	**Contrast**	Adjusts the Contrast of the selected camera.
5	**Adjust Default**	Adjusts the color settings for the selected camera back to the System default.
6	**Adjust All Default**	Adjusts the color settings for ALL cameras to the System default.
7	**Apply to all Channels**	Applies current settings to all camera channels.

MOTION SETUP

The XVR unit allows the user to adjust several different Motion Settings and create motion detection areas.



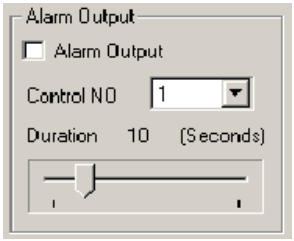
1	**Beep on Detect**	When motion is detected an alarm sounds.
2	**Full Screen Pop-Up**	When motion is detected, the camera displays in full screen mode.
3	**Clear**	Clears all Motion Regions on the selected camera.
4	**Apply to all Channels**	Applies the current motion regions to all camera channels
5	**Sensitivity**	Adjusts the sensitivity within the designated Motion Area.
6	**Alarm Output**	Enables the Alarm Output. The Alarm Output defaults to Control Output #16; the System designated default for an external alarm
7	**Pre Alarm**	Adjusts the amount of seconds recorded before an alarm event.
8	**Post Alarm (Motion)**	Adjusts the amount of seconds recorded after a Motion alarm event.
9	**Post Alarm (Sensor)**	Adjusts the amount of seconds recorded after a Sensor alarm event.
10	**Regular Interval Recording**	Select to enable recording at the interval specified in the time box.

Create a Motion Area

1. Place the mouse pointer at the upper left hand corner of the area to designate, click and hold down the left mouse button, drag the mouse. Let go of the button when the Motion Area is the size desired.
2. Create up to five Motion Regions per camera. Resize and move them by dragging the sides and corners of the Motion Area.

Activating an Alarm on a Motion Event

1. In the Motion Setup window, select a camera to edit from the drop down menu
2. Create a motion area.
3. Select the Alarm Output box.
4. Select a Control Output to activate for the selected camera.
5. Select the duration you wish the Control Output to be activated for when a Motion event occurs.



Clear Motion Area

To Clear all Motion Regions on the selected Camera click the Clear Button

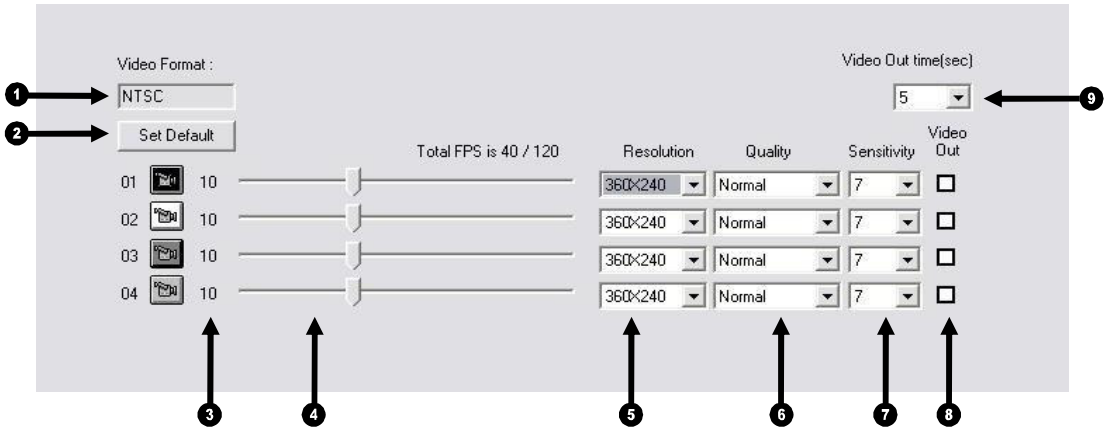
FRAME SETUP OVERVIEW

The Frame Setup Menu allows configuration of the PPS, resolution, quality, and sensitivity of camera channels. When configuring the PPS sliders the BLUE slider represents the PPS the XVR will record during intensive recording and have available for transmitting to remotely connected systems. The RED slider represents the PPS that will be recorded by the XVR under normal recording conditions.

The total PPS of all blue sliders may not exceed the recording PPS of the XVR unit. The PPS of a red slider may not exceed that of the blue slider for the same channel. The dual sliders allow configuration of the XVR to record at a lower PPS while still being able to transmit at a higher PPS to remote connections.

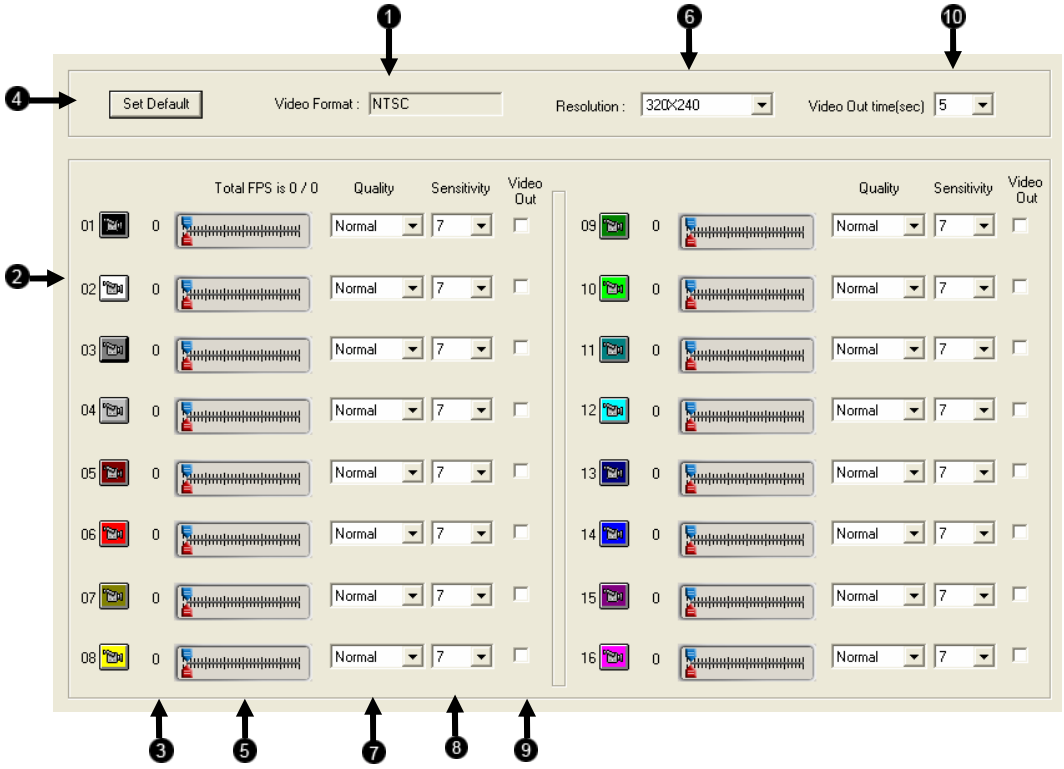
Ex. If a camera channel is set to 25 PPS (blue) and 7 PPS (red), the XVR will record at 7 PPS and users viewing live video remotely can receive up to 25 PPS.

Frame Setup (4 Channel)



1	**Video Format**	Displays the Video Format (NTSC/PAL).
2	**Set Default**	Resets all camera settings to their default values.
3	**Number of Frames**	Displays the number of PPS that are selected for recording.
4	**Frame Select**	Move the slider to select the number of PPS to record
5	**Resolution**	Sets the recording resolution of the camera channel.
6	**Quality**	Sets the quality of the video recorded by XVR. Lower quality video has a smaller file size but appears more pixilated.
7	**Sensitivity**	Sets the Keyframe refresh rate. Adjusting this setting can have negative effects on video quality. Do not change from default setting unless instructed by a system administrator.
8	**Video Out**	Enables video from selected cameras to be viewed on spot monitor display.
9	**Video Out Time**	Select the amount of seconds each camera will be displayed on spot monitor

Frame Setup (16 Channel)

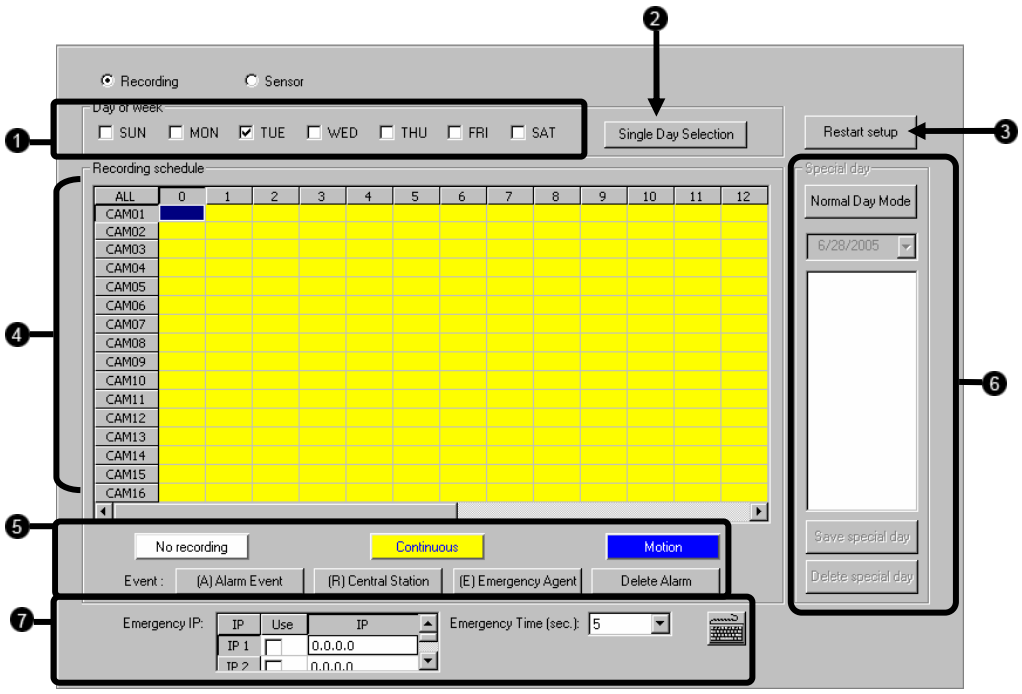


1	**Video Format**	Displays the Video Format (NTSC/PAL).
2	**Camera Number**	Adjust the recorded Pictures Per Second by sliding the bar to the left and right.
3	**Number of Frames**	Displays the number of frames that are selected for each camera.
4	**Set Default**	Resets all camera settings to their default values.
5	**Frame Select**	Adjusts the frames for each camera. The blue slider designates the number of pictures a second that can be captured by the selected camera, while the red slider designates how many pictures can be recorded by the designated camera.
6	**Resolution**	Displays the available Resolution options. The same resolution will be used for all cameras.
7	**Quality**	This setting affects the quality of the video. Increasing the quality of the camera can reduce the amount of pixilation within the image considerably, but also increases the file size.
8	**Sensitivity**	The sensitivity adjusts the rate at which the Keyframe refreshes. This option directly affects the codec used to record the video. Adjusting this setting can have drastic negative effects on the quality of the video. It is highly recommended that this setting be left at the default setting unless so instructed by a system administrator.
9	**Video Out**	Enables video from selected cameras to be viewed on spot monitor display.
10	**Video Out Time**	Select the amount of seconds each camera will be displayed on spot monitor

SCHEDULE SETUP

Recording Schedule

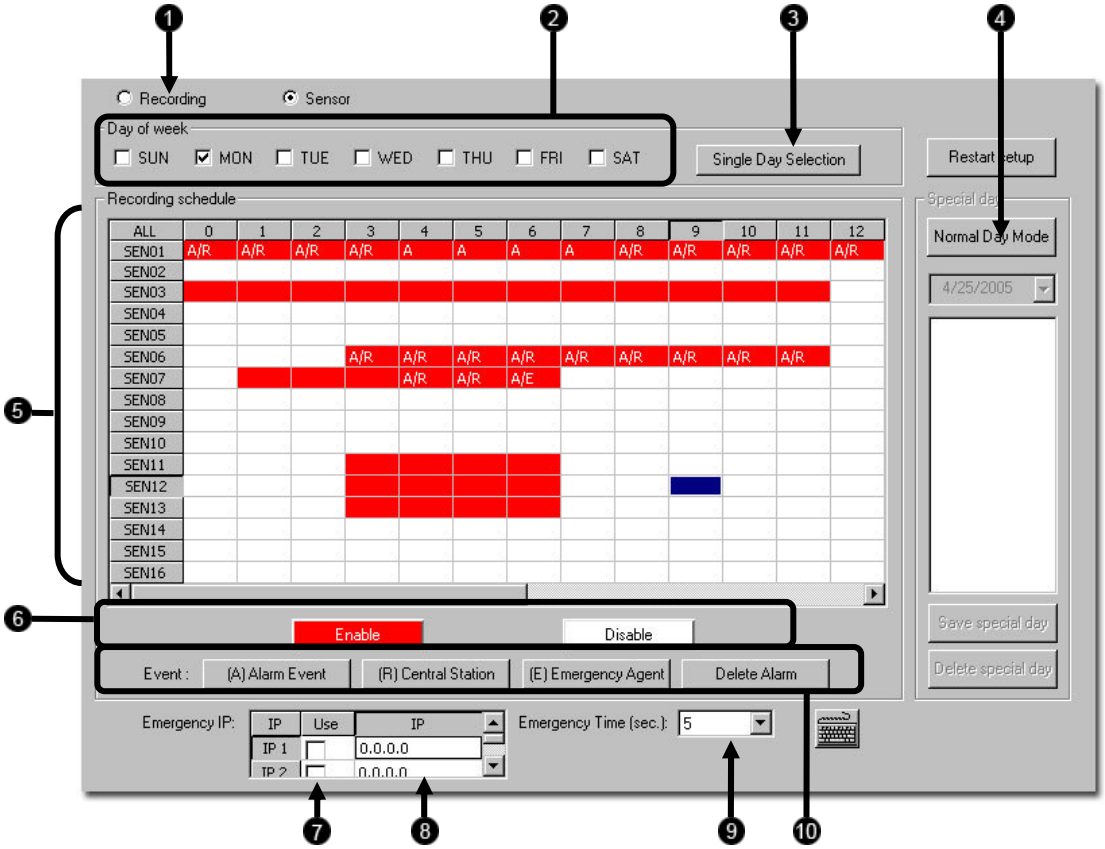
The Recording Schedule Window allows the user to create different recording schedules based on the day, time, and type of recording desired. In addition, this window contains the System Restart options that allow the user to perform basic system maintenance by automatically scheduling the XVR to restart periodically.



1	**Day of the Week**	Selects the day of the week for the schedule being made.
2	**Day Selection Mode**	Choose between Single Day and Multi Day Selection.
3	**System Restart Setup**	Displays the restart options. The XVR unit allows you to specify the unit to be automatically restarted one or more days a week.
4	**Recording Schedule Window**	Displays and allows the user to edit the current Recording Schedule.
5	**Recording Mode**	Selects the Recording Mode. The Recording Modes are No Recording, Continuous Recording and Motion Recording.
6	**Special Day Recording**	Create special recording schedules for specific days.
7	**Emergency IP Setup**	Configure IP addresses to be notified based upon certain Alarm-related criteria. NOTE: This function relies upon the use of the Emergency Agent Software

Sensor Schedule

The sensors will supersede all other types of recording modes (Motion, Continuous, No Recording). Regardless of the recording schedule of a particular camera, if a sensor event occurs the associated cameras will begin recording as a Sensor Event. Sensor Recordings will be flagged and searchable using the Index Search Mode. Cameras are associated to sensors in the Camera Setup Menu.



1	**Recording**	Toggles to the Recording Window (default)
2	**Day of the Week**	Selects the day of the week for the schedule being made.
3	**Single Selection Mode**	Toggles between Multi and Single day selection
4	**Special Day Recording**	Toggle between Special Day Mode and Normal Day Mode.
5	**Recording Schedule Window**	Displays and allows the user to edit the current Recording Schedule
6	**Enable/Disable**	Enables the selected sensor for the time period specified
7	**Use**	Enables/Disables the user defined Emergency IP Address.
8	**Emergency Time**	Specifies the amount of time (in seconds) to transmit the video to the Emergency Agent Software.
9	**Emergency IP**	Specifies the IP Address of the PC running the Emergency Agent software
10	**Event**	Define: motion as an Alarm Event, whether to transfer the Alarm Event to the SCS Multi-Site Software, and/or whether to send video to the Emergency Agent software.

Create a Recording Schedule

1. Select a day to begin creating the schedule for -or- Select the Day Selection Mode Button, enabling Multi Day Selection, to create the same schedule for multiple days.
2. Highlight the Time-Blocks within the Recording Schedule Window for the camera(s) selected to schedule. Once the desired Time-Blocks are highlighted, click a Recording Mode Button. The Time-Blocks should now appear Blue for Motion, Yellow for Continuous and White for No Recording

NOTE: Leave cameras recording with Sensor Detection set to No Recording for the specified time block(s).

Create a Sensor Schedule

1. Select the Schedule Menu option and select the Sensor Radio Button. Select a single day or click the Day Selection Mode Button to include multiple days in the schedule.
2. Highlight the Time-Blocks within the Recording Schedule Window for the sensor(s) to enable and schedule. Once the time blocks are highlighted click the Enable Button. The time block will now appear red.

Scheduling Alarm Events

There are three types of Alarm Events:

ALARM EVENT: This option logs the Alarm Events on the local server.

CENTRAL STATION: This option sends the Alarm Events to Central Station software.

EMERGENCY AGENT: This option sends the Alarm Event to the Emergency Agent software.

Motion can be designated as an Alarm event. Often motion does not need to be treated as an Alarm event. Ex: During work hours motion that occurs is expected and should not be treated as an Alarm. However, after business hours are over, any motion that occurs should be treated as an Alarm.

1. Select the Schedule Menu – Select either Recording or Sensor
2. Highlight time blocks in the schedule that have been set to Motion (or Sensor) and click the desired Event buttons (Alarm Event, Central Station, Emergency Agent). A corresponding letter will display in the selected time blocks

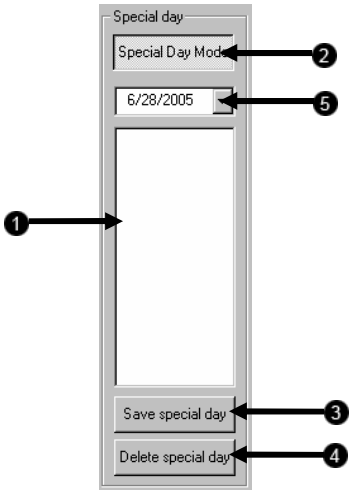
Emergency Agent Schedule

Video recording triggered by motion or sensor events can be sent to the Emergency Agent software.

1. Enable the Emergency Agent Event (see Scheduling Alarm Events above)
2. Enter the IP Address of a PC running the Emergency Agent software in the IP Address
3. Select the box next to the IP Address to enable it. Only one IP Address is supported at a time.
4. Enter the recording duration (in seconds) in the Emergency Time field.
5. See the Emergency Agent chapter for detailed information on setting up the Emergency Agent software.

Special Day Schedule

The user can create days that have a unique recording schedule. If necessary create these on days that are 'not typical' such as Holidays, Special Events, etc.



1	**Special Day Schedule**	Displays the current saved Special Days.
2	**Special Day Mode**	Enters / Exits the Special Day Mode. Once in Special Day Mode you can create, edit and delete Special Days.
3	**Save Special Day**	Saves the selected Special Day Schedule.
4	**Delete Special Day**	Deletes the selected Special Day Schedule.
5	**Date Menu**	Displays the current day of scheduling and allows selection of Special Day date.

Creating/Editing a 'Special Day' Schedule

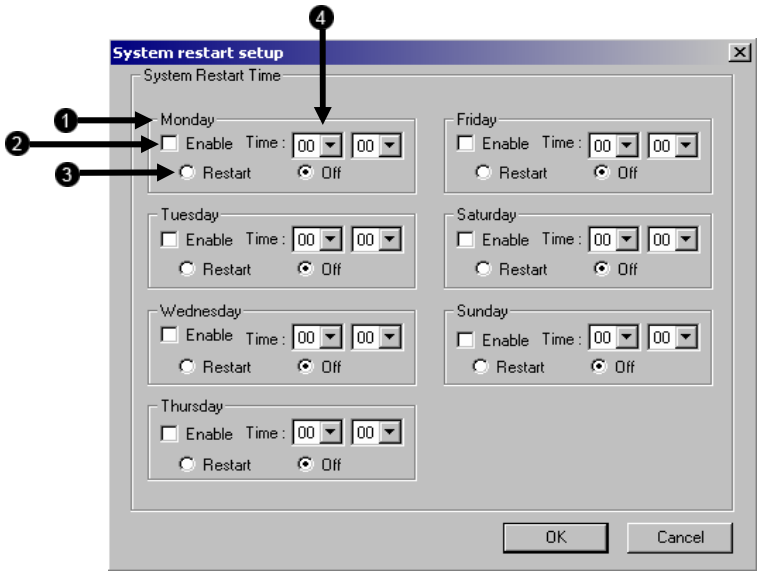
1. Click the Normal Day Mode Button to enable the Special Day Mode.
2. Select a day by typing the date or clicking the arrow to the right of the Date Bar.
3. Highlight the time-blocks within the Recording Schedule Window for the camera(s) selected to schedule. Once the desired Time-Blocks are highlighted, click a Recording Mode Button.
4. When finished creating the schedule click the Save Special Day Button. The special day should now appear as a date in the Special Day Schedule.

Deleting a 'Special Day' Schedule

1. Select a Special Day from the Special Day Schedules
2. Click the Delete Special Day Button.

SYSTEM RESTART SETUP

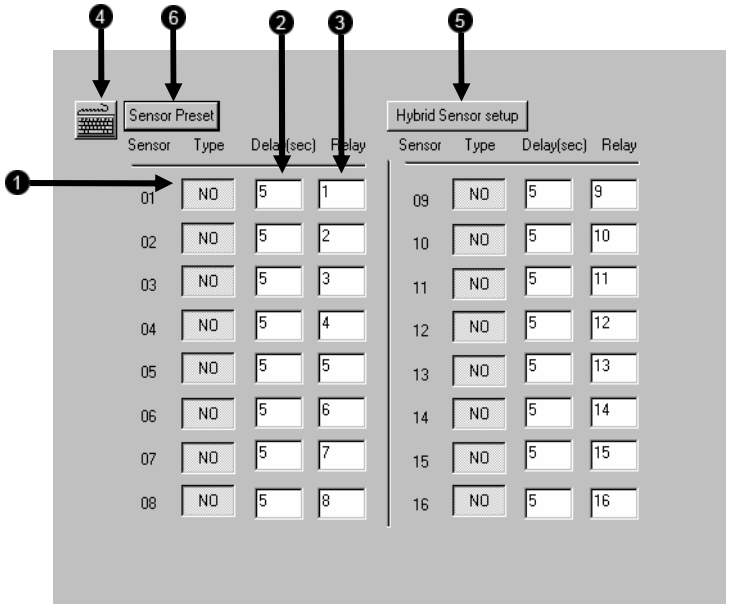
System Restart Setup allows the user to define a schedule wherein the XVR automatically restarts according to specified parameters.



1	**Day of the Week**	Displays the day for the settings being adjusted.
2	**Enable**	Enables the XVR to shut down the computer at the time specified. This option alone does NOT restart the XVR, it just turns it off.
3	**Restart / OFF**	Enables the XVR to restart itself once it has been shut down.
4	**Time**	Specifies the time to Shut Down or Restart the XVR unit.

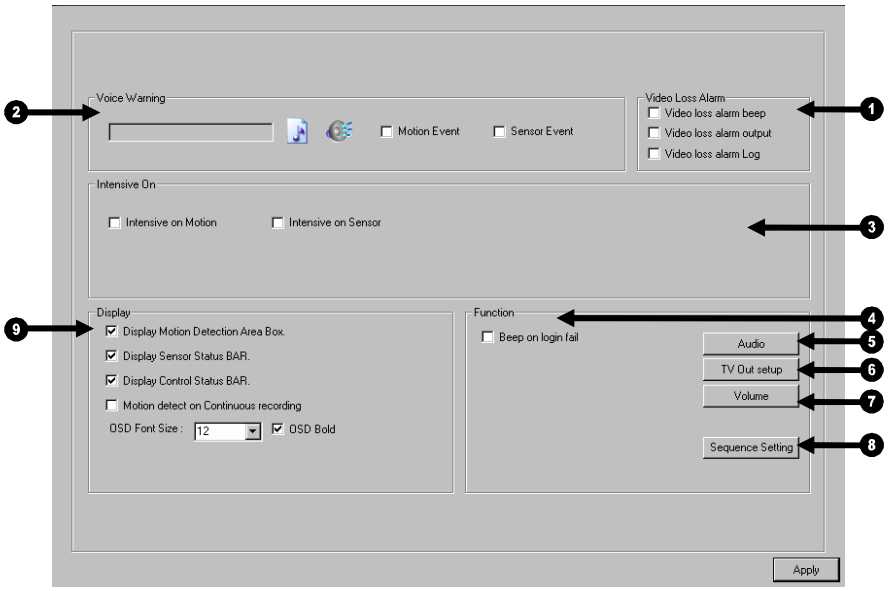
ALARM SETUP

The Sensor and Output Window allows you to enable, disable and configure Sensors and Control Outputs.



1	**Type**	Selects whether the Sensor will be Normally Open (NO) or Normally Closed (NC).
2	**Delay**	Adjusts the amount of time (in seconds) to ignore the sensor if it is continuously activated.
3	**Relay**	Selects the Control Output to activate once the Sensor has been tripped. Users can select multiple Control Outputs by placing a comma between numbers.
4	**Onscreen Keyboard**	Clicking this button brings up an onscreen keyboard.
5	**Hybrid Sensor Setup**	Allows users to configure Hybrid (IP) Sensors (requires a software upgrade)
6	**Sensor Preset**	Allows users to create and name sensor presets.

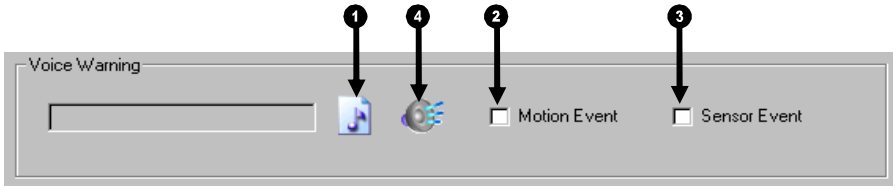
GENERAL SETUP



1	**Video Loss Alarm**	Allows you to customize the settings in the event of video loss
2	**Voice Warning**	Select a custom sound to play when a Motion or Sensor Event occur.
3	**Intensive Recording**	Enables increased resolution and pictures per second on a Motion or Sensor Event.
4	**Beep on Login Fail**	Enables the XVR to beep continuously in response to a failed login attempt. Only an authorized login will stop the beeping.
5	**Audio**	Enable audio capture on available channels
6	**TV Out Setup**	Allows the user to enable cameras and settings for video output to a monitor display. (Upgrade Option)
7	**Volume**	Adjusts the Speaker Volume or Mute all speakers
8	**Sequence Setting**	Allows the picture to the Video Out to automatically cycle through channels at a set speed. Ex: .Cycle through channels 1-6 at 4 second intervals.
9	**Display**	Allows the user to enable the Motion Detection Area Box, the Sensor Status Bar and the Control Status Bar on the Main Display Screen and adjust the On Screen Display font size for cameras.

Voice Warning

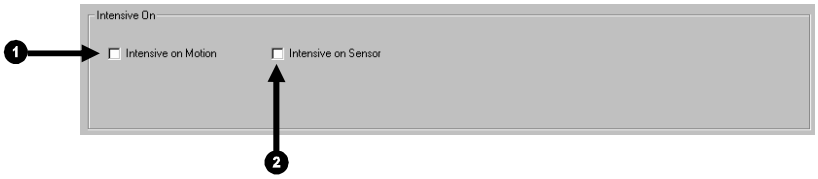
The XVR unit allows users to play a sound file when either a Motion event or Sensor event occur. This file can be a custom created sound file that is unique to the application. The selected WAV file is played through speakers attached to the XVR unit.



1	**Open**	Select the location of the .WAV file to use.
2	**Motion Event**	Enables the Voice Warning on Motion events.
3	**Sensor Event**	Enables the Voice Warning on Sensor events.
4	**Play Selected WAV**	Plays the selected .WAV file.

Intensive Recording Overview

The Intensive Recording Option allows you to increase the Pictures Per Second and the resolution of any camera recording using sensor activation. When the intensive recording is activated, the resolution of the remaining cameras is immediately reduced to 360x240 and the Pictures Per Second to a user-specified level. This guarantees that the Pictures Per Second and Resolution will be set correctly and not exceed the XVR limitation.



1	**Intensive On-Sensor**	Enables Intensive Recording to Sensor events.
2	**Intensive On-Motion**	Enables Intensive Recording to Motion events.

How to Use Intensive Recording

The Intensive Recording option is set up as 'All or Nothing'. This means that once enabled (associated with sensors); all cameras associated with sensors will activate the Intensive Recording.

To activate the Intensive Recording option, follow these steps.

1. Inside Camera Setup, select the camera to use and enable the sensor to associate with it.
2. Click on General Setup. Enable the Intensive-on-Sensor and/or Intensive on Motion options.
3. Open the Schedule Setup. Select the Sensor Radio Button.
4. Enable the sensor by creating a schedule for it
5. Click the Apply Button and exit out of setup.

Audio

A 16 channel Surveillix XVR is capable of recording up to 2 channels of audio, a 4 channel XVR can record up to 4 channels.

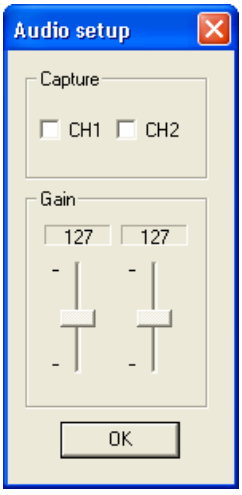
AUDIO FEATURES:

- 8000 Hz playback in Live Mode
- Up to 48000 Hz playback in search mode
- Mono Sampling

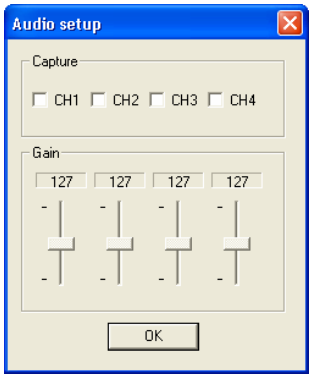
DATA SIZE (Per channel)

- 1 Second: 1625 bytes
- 1 Minute: 97,500 bytes
- 10 Minute: 975,000 bytes
- 1 Hour: 5,850,000 bytes
- 1 Day: 140,400,000 bytes (Approx 140MB)

Click the Audio Capture Channels boxes to enable recording and adjust the Gain to the desired level.



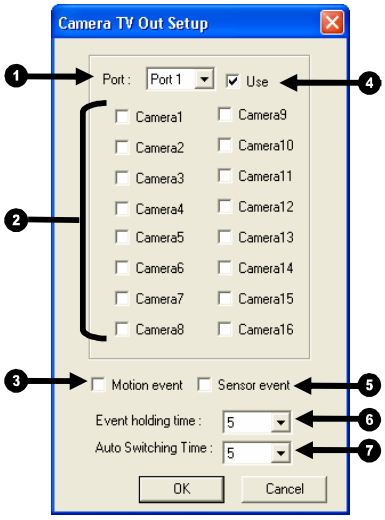
16 Channel



4 Channel

TV-Out Setup

The XVR unit features an optional TV-Out functionality which allows users to output video from any number of cameras, in sequence, to a television or monitor display.



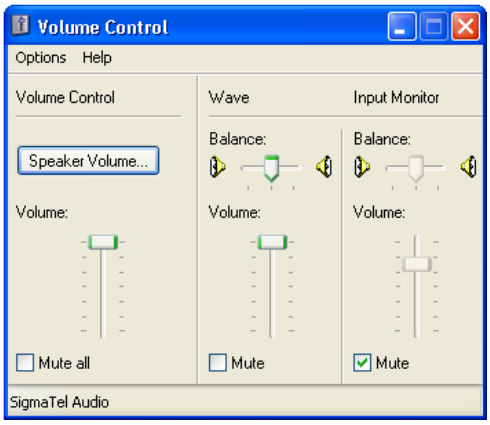
1	**Port**	Select the TV Out Port to use **NOTE:** Each Port must be configured individually, i.e. one after the other.
2	**Camera Check Box**	Check each camera to display through the TV-Out port.
3	**Motion Event**	Checking this box causes a camera to display immediately when a motion event occurs.
4	**Use Check Box**	Check this box to enable TV-Out functionality for the selected port.
5	**Sensor Event**	Checking this box causes a camera to display immediately when a sensor event occurs.
6	**Event Holding Time**	The amount of seconds for a camera to display after an event, such as motion, occurs.
7	**Auto Switching Time**	The amount of seconds to pass between the switching of cameras.

Volume

The volume control allows fine tuning of the volume settings on the XVR.

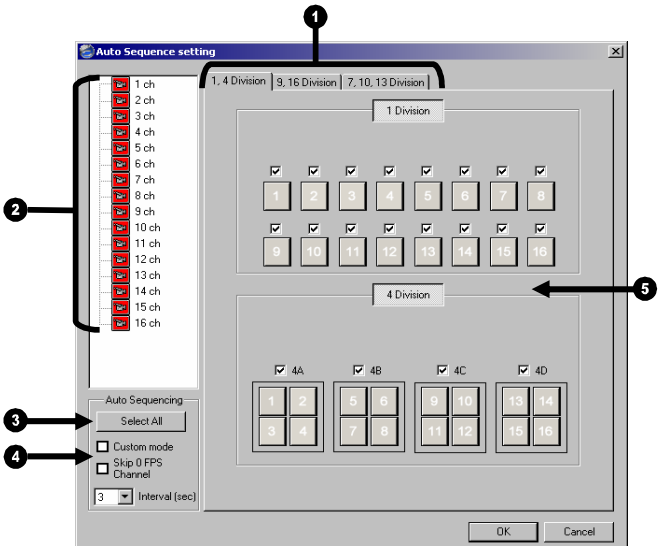
Volume Options:

- **Slider Controls** – Used to adjust the literal volume for the respective devices listed.
- **Mute Checkbox** – Check the mute box to mute volume on any of the device columns or check the Mute All checkbox to mute all volume on the XVR.



Auto Sequencing Setting

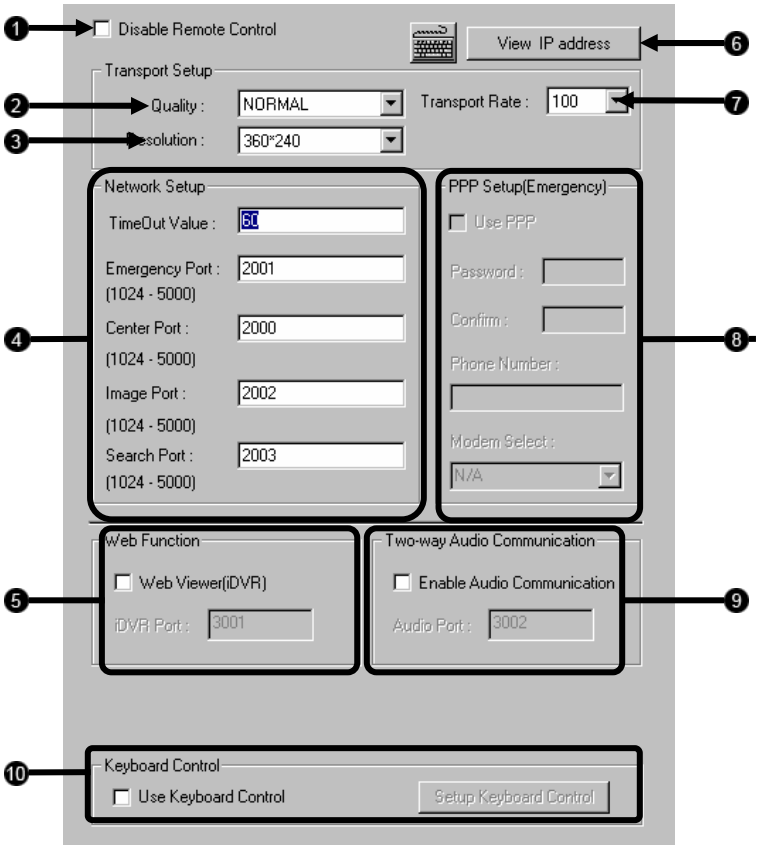
Auto Sequencing is used either in the main screen when Auto Sequencing has been enabled or when a Spot-Monitor out signal is used to display on a spot monitor. Auto Sequencing conveniently displays video channels and at specified intervals, sequences through each selected channel.



1	**Division Tabs**	These three tabs present the various division options for Auto Sequencing. **Ex:** 4 division creates a quad-display.
2	**Channel Selection**	Click each channel to include in Auto Sequencing.
3	**Select All**	Clicking this button causes all channels to be included in Auto Sequencing.
4	**Auto Sequencing settings**	This area allows users to define settings for Auto Sequencing. Custom Mode allows users to define non-standard divisions. Skip 0 FPS Channel causes cameras with no video signal to be skipped. The Interval Menu allows users to select the interval (in seconds) between switching Cameras.
5	**Division selections**	Each Division Section allows the user to define which cameras will be included in the sequence. Check individual Cameras to include in the Auto Sequence.

NETWORK SETUP

Network Setup allows the user to adjust settings such as Ports, setup emergency PPP information for use with the Emergency Agent and enable Remote Access.



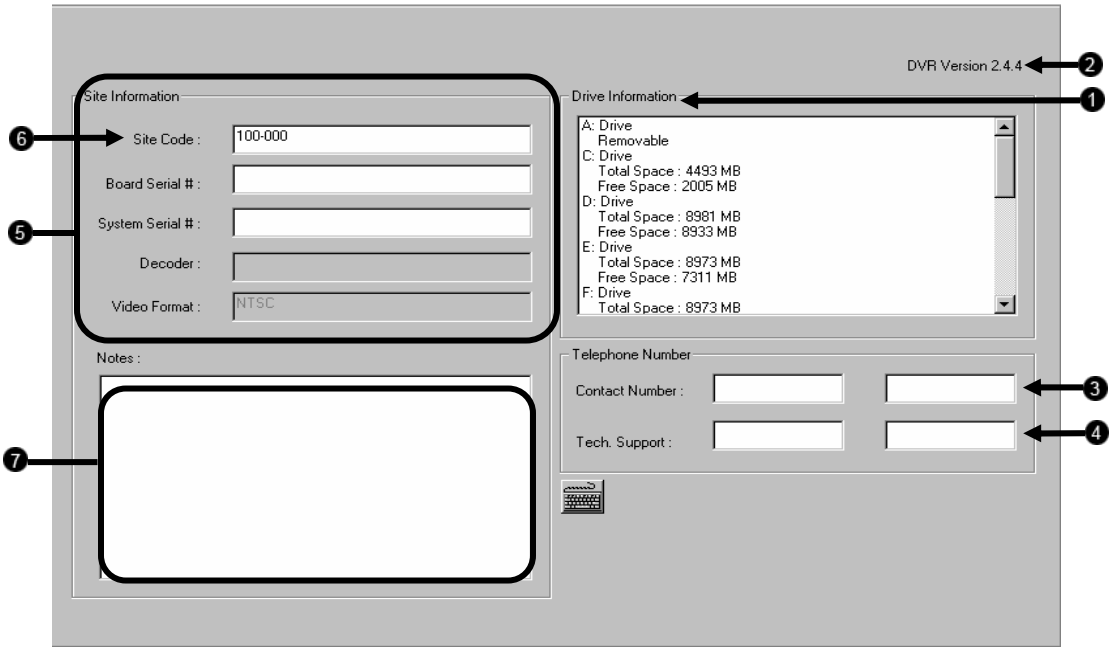
1	**Disable Remote Control**	Enables or disables access to the XVR from remote connections.
2	**Quality**	Adjusts the resolution quality when transferring video to a remote client.
3	**Resolution**	Adjusts the resolution of the images being sent to remote clients. By setting the resolution low, the images will be sent faster, however, the image quality will be reduced considerably.
4	**Network Setup**	Specifies the Ports to use when transferring data.
5	**Web Function**	Enables the use of the Web Viewer interface.
6	**View IP Address**	Allows the user to view the IP configuration of the XVR.
7	**Transport Rate**	Transport Rate is essentially a bandwidth throttle. This throttle is based on percentage of free network.
8	**PPP Setup (Emergency)**	Defines the modem and PPP information to dial to a remote client when the Emergency Agent is activated.
9	**Two-way Audio Communication**	Enables Two-Way Audio communication between the XVR and a remote location.
10	**Keyboard Control**	Enables the use of RS-232 Keyboards with the XVR.

PTZ SETUP

The PTZ Setup Window allows enabling of PTZ cameras, creation of Presets, creation of Tours, and adjustment of camera speed settings. Many options listed here are features only available on selected cameras. Refer to the PTZ chapter in this manual for further information on setting up PTZ cameras and setting PTZ options.

INFORMATION

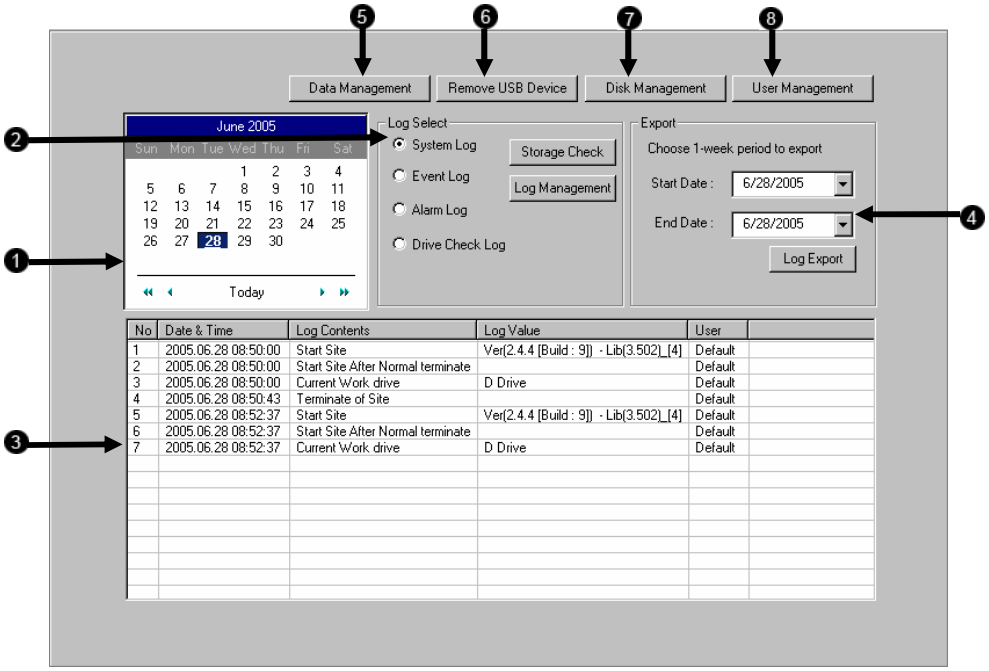
The Site Information Window allows users to define the site code necessary for connecting to remote software, save comments relative to the XVR and store tech support and contact number information.



1	**Drive Information**	Displays the Total Space and Free Space of the Drives installed in the XVR.
2	**Site Version**	Displays the XVR Software version.
3	**Contact Number**	Displays a user specified Contact Phone Number.
4	**Tech Support**	Displays the Tech Support Phone Number.
5	**Site Information**	Displays misc. information about the XVR.
6	**Site Code**	A user-specified unique identification name that is used by other XVR software to connect to the XVR. (Remote, Emergency Agent, SCS)
7	**Notes**	Enter comments relative to the description of this XVR.

ADMINISTRATIVE SETUP

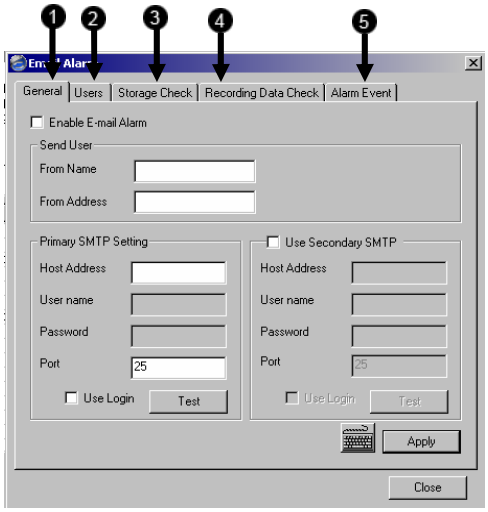
The Log Viewer displays detailed information about the XVR, including Shut Down and Restart information, User Logins and Recording problems and failures. This can be a valuable tool to Administrators.


5
6
7
8
Data Management
Remove USB Device
Disk Management
User Management
2
June 2005
Sun Mon Tue Wed Thu Fri Sat
1 2 3 4
5 6 7 8 9 10 11
12 13 14 15 16 17 18
19 20 21 22 23 24 25
26 27 28 29 30
Today
1
Log Select
System Log
Event Log
Alarm Log
Drive Check Log
Storage Check
Log Management
Export
Choose 1-week period to export
Start Date : 6/28/2005
End Date : 6/28/2005
Log Export
4
3
No Date & Time Log Contents Log Value User
1 2005.06.28 08:50:00 Start Site Ver[2.4.4 [Build : 9]] - Lib[3.502]_[4] Default
2 2005.06.28 08:50:00 Start Site After Normal terminate Default
3 2005.06.28 08:50:00 Current Work drive D Drive Default
4 2005.06.28 08:50:43 Terminate of Site Default
5 2005.06.28 08:52:37 Start Site Ver[2.4.4 [Build : 9]] - Lib[3.502]_[4] Default
6 2005.06.28 08:52:37 Start Site After Normal terminate Default
7 2005.06.28 08:52:37 Current Work drive D Drive Default

1	**Calendar**	Displays the days with Log information in a bold format
2	**Log Selection**	Displays the Hardware Log file information which includes Scan Disks, and system recording successes and failures.
3	**Log View**	Displays information pertaining to Logins, reboots and non system events.
4	**Export**	Allows the log files to be exported in one to seven day increments.
5	**Data Management**	Allows the user to change the XVR's preferred method of Data Storage
6	**Remove USB Device**	Click to safely remove a connected USB device
7	**Disk Management**	Opens the Windows Disk Management console.
8	**User Management**	Opens the User Management window, allowing the user to define user permissions, passwords and restrictions.

STORAGE CHECK

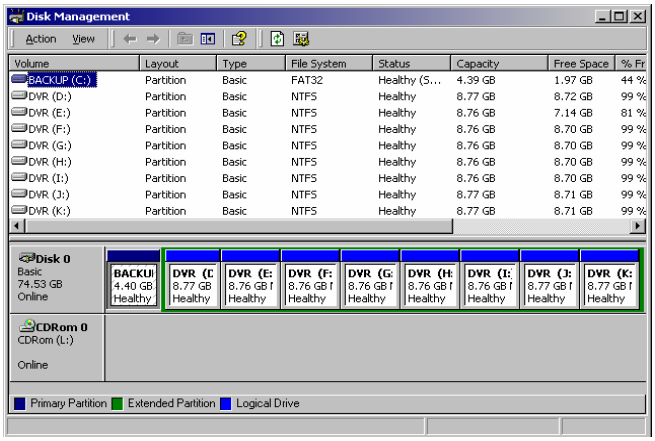
The Storage Check allows users to configure E-mail alarms, assign users to E-mail alarms and configure storage checks on the Surveillix XVR.



1	**General**	Configure E-mail alarms for the Surveillix XVR.
2	**Users**	Configures which users will receive E-mails on alarm events
3	**Storage Check**	Configures when storage checks will be performed and their frequency.
4	**Recording Data Check**	Configures when recording checks will be performed and their frequency.
5	**Alarm Event**	Configures when general alarms will be sent.

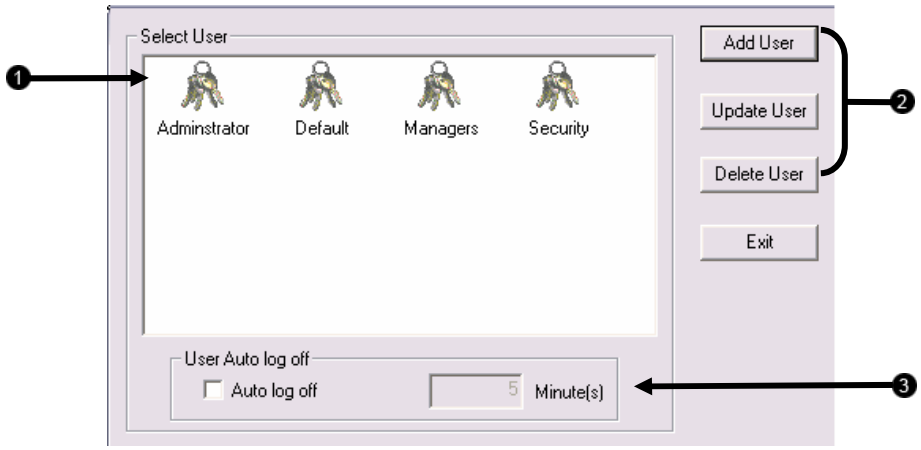
Disk Management

The Disk Management window is a native Windows function. This window displays the partition scheme and health status of the Hard Disk Drives in the XVR. This window is often used to troubleshoot an XVR, or verify the amount of Hard Drive storage installed. For more information about Disk Management, consult a Windows XP manual.



User Management

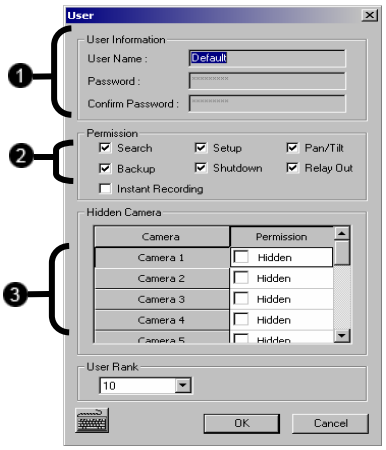
The User Management Console allows the administrator to create, edit, and delete user accounts. Each user account can be assigned different privileges to limit the usage of the XVR system. Users can be given administrator privileges by enabling all rights, however only the true administrator account can log into the User Management Console.



1	**Select User**	Click to select the appropriate user.
2	**Add/Update/Delete User**	Allows adding a new user, updating a current user or deleting a current user. **NOTE**: The Delete User Button immediately deletes the user – use cautiously
3	**User Auto Log Off**	Enable Auto Log Off after specified amount of minutes of inactivity. This feature affects all users.

Add a New User

1. Click Add User to open the User Management Window.
2. Enter a user name and password.
3. Enable appropriate Permissions.
4. Select cameras to hide from the user.



1	**User Information**	Enter the User Information, and Password.
2	**Permission**	Specify the features a given user may access on the XVR.
3	**Hidden Camera**	Hide certain cameras from a user. The user will not be able to view the cameras in Live Mode.

User Rank

The User Ranking structure allows the option to assign a privilege system (1-10 where one has the most rights) to users of the XVR Software. For example. Since only one user is allowed to use the PTZ controls at any one time, an administrator with a higher rank can kick another user out and take control of the PTZ.

The User Rank option affects Setup Access and PTZ Control. The XVR Software can only have 1 user accessing Setup or the PTZ controls at any given time. A user with a higher rank will kick another user out and then open Setup or the PTZ controls.

1. Enter Setup.
2. Click the Administrative Button.
3. Click the User Management Button.
4. Enter the Administrator password and click OK.
5. Select a user from the Select User field and click the Update User Button.
6. Set the user's rank using the User Rank drop down menu and press the OK Button to save changes.

Changing the Administrator Password

1. Inside Administrative Setup, click the User Management Button. When the login screen appears click the Change Password Button.
2. Enter the new password in the prompt that appears and click OK.

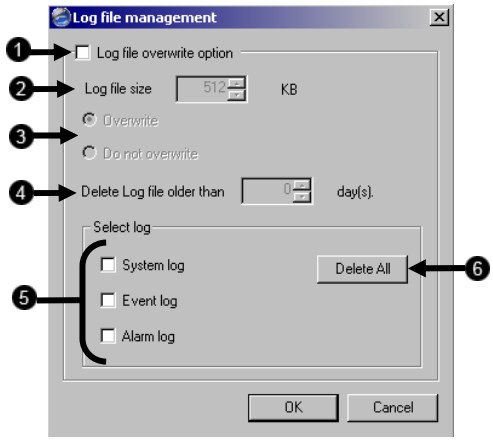
NOTE: The default Administrator login information is:

Username: Administrator

Password: <none>

Log Management / Log Export

The Log Management window provides the user with options such as log overwriting and log deletion. Log Export allows the user to export (save) a log to disk - to assist in troubleshooting the XVR.



1	**Log File Overwrite**	Check this box to enable the overwriting of logs according to specifications.
2	**Log file size**	Specify the maximum size of a log.
3	**Overwrite / Don't Overwrite**	Choose whether or not to overwrite when full.
4	**Delete Log Files Older Than:**	The XVR will store log files for only the specified number of days.
5	**Select Log**	Check the type of log(s) to delete
6	**Delete All**	After checking the log(s) to delete, click this button to proceed with the deletion.

SEARCH

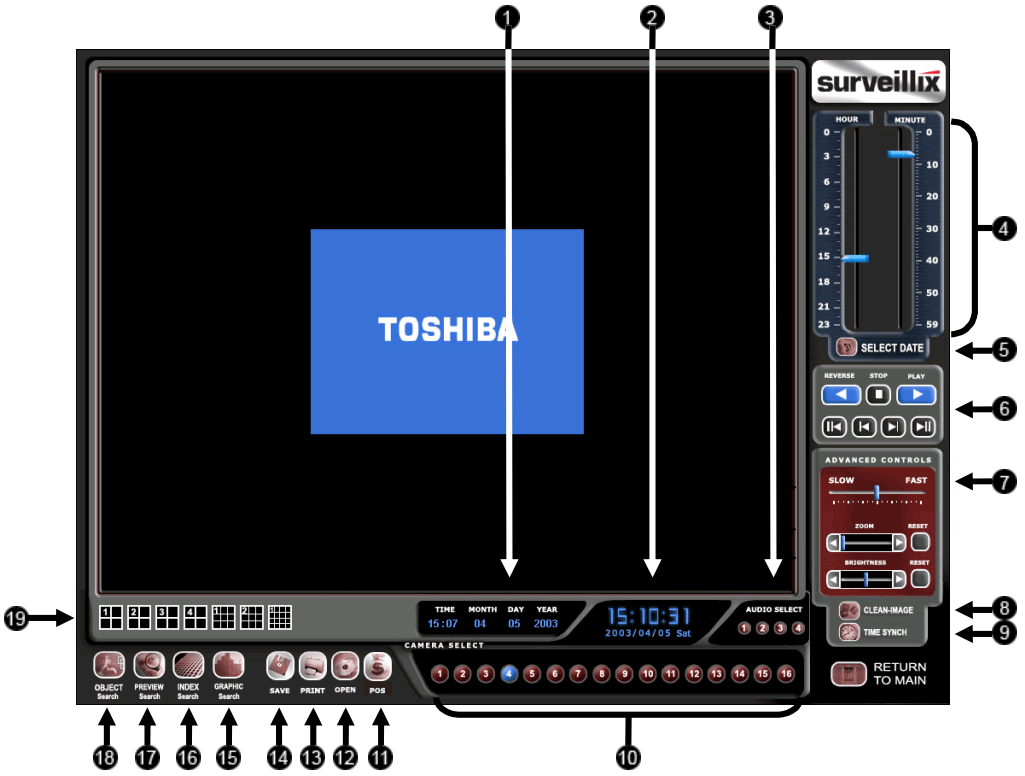
This chapter includes the following information:

- Setup Overview
- Channels
- Color
- Schedule
- Speed
- Motion Detect
- Password
- Pan/Tilt
- Quit to Explorer

SEARCH OVERVIEW

The XVR unit has several options that allow the user to easily search through, and find, a particular section of video. From Motion/Sensor indexing to calendar views highlighting days with recorded video; the XVR unit is equipped to help the user quickly find a specific video or event.

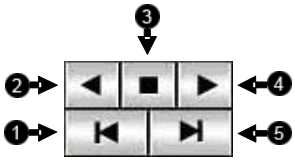
The following chapter describes in detail how to use the XVR Search features.



1	**Date/Time (video)**	Displays the date and time of the recorded video being viewed
2	**Date/Time (actual)**	Displays the current date and time
3	**Audio**	Displays the audio channel buttons to allow audio playback. **NOTE:** Audio buttons are only viewable when one camera is selected.
4	**Hour/Minute Control Bar**	Displays the minutes for a selected hour - 0 to 60 - and displays the hours for a given day - 0 to 24. Move the Slide Bar Selector to select an hour to view.
5	**Select Date**	Select a new date to be searched.
6	**Play Controls**	Control playback of video being viewed.
7	**Advanced Controls**	Move the Slide Bar to: Increase and decrease the playback speed of video. Increase the size of the image (up to full screen). Adjust the brightness of the selected camera.
8	**Clean Image**	Extensive motion can create a 'digital blur' that can interfere with the quality of an image. By selecting the Clean Image option, two frames are interwoven to create a smooth, detailed image.
9	**Time Sync**	Synchronizes a single channel of video to playback in real time. (ordinarily the video may playback slower or faster depending on several factors including how many PPS recorded and number of cameras playing at the same time.)

10	**Camera Select**	Enable (or disable) selected cameras to perform searches.
11	**POS**	Enables search of POS data
12	**Open**	Opens video from a saved location on disk.
13	**Print**	Outputs a selected image to an attached printer.
14	**Save**	Save a selected image as a .JPG file or to save a video clip in an .AVI format.
15	**Graphic**	Activates the Graphic Search Option
16	**Index**	Activates the Index Search Option
17	**Preview**	Activates the Preview Search Option
18	**Object**	Activates the Object Search Option.
19	**Screen Division Buttons**	View one or more sets of cameras at a time

Play Controls



1	**Back Frame**	Moves video back one frame.
2	**Rewind**	Rewinds video.
3	**Stop**	Stops video playback
4	**Play**	Plays video.
5	**Forward Frame**	Moves video forward one frame.

ADJUST THE BRIGHTNESS OF AN IMAGE

1. Select an image to adjust by double-clicking on the desired image. Multiple images cannot be adjusted at one time.
2. Move the Bright slide bar to the right or left to adjust the brightness.
3. Reset the Brightness by moving the slider back to the center of the bar.

ZOOMING IN ON AN IMAGE

1. Select an image to adjust by double-clicking on the desired image. Multiple images cannot be adjusted at one time.
2. Move the Zoom slide bar to the right or left to zoom in or out of an image.
3. Reset the Zoom by moving the slider back to its original position on the bar.

ZOOMING IN ON A PORTION OF AN IMAGE

1. Using the mouse pointer, point to the area of interest on the image and click the right mouse button.
2. Keep clicking the right mouse button to zoom in further.
3. Continue clicking the right mouse button and the image zoom will cycle back to the original size.

OPEN VIDEO FROM SAVED LOCATION

1. Previously saved video clips or backup files can be searched for content. Find file by date and time or by name.
2. Click the Open Button to search for the saved file
3. Select a file from the list of saved clips and backup files or search by start hour.
4. Click OK to open the saved file

TIME SYNC

The Time Sync option synchronizes a single channel of video to playback in real time. Ordinarily the video may playback slower or faster depending on several factors, including how many PPS recorded and number of cameras playing at the same time.

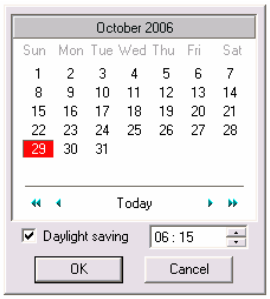
1. Select a single image to synchronize by double-clicking on an image.
2. Click the Time Sync Button. The video will now playback in real time.

CLEAN IMAGE

The XVR unit is capable of recording video using one of three different resolutions. When using the 720 x 480 resolution, two fields are mixed. Because of the timing gap between the two fields, according to the standardized image rules, after image might occur to high speed moving images. The Surveillix XVR unit allows the user to remove this by clicking the Clean Image Button.

DAYLIGHT SAVINGS TIME

The XVR automatically adjusts for Daylight Savings Time changes. When the hour "jumps forward" no video is lost because an hour is skipped. However when the hour "falls back" there is a duplicated hour that under normal circumstances would be recorded over. The Surveillix XVR actually records both hours and allows the user to select which hour to play if the need arises.



To access the 'lost hour':

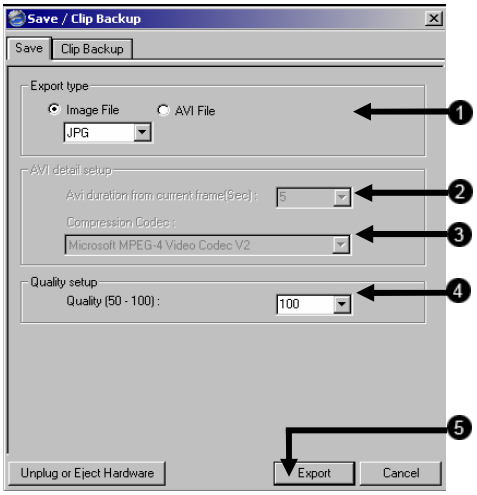
1. From the Search screen, select the Calendar Button.
2. Select the date when Daylight Savings time 'lost' an hour. An option appears which says Daylight Saving.
3. To play back the 'lost hour', select the Daylight Savings option.
4. Click OK to confirm the date and begin playing the video using standard search features.

SAVE TO JPG OR AVI

The XVR unit can export single images in the Image file formats and save video clips in an .AVI format. Both .JPG and .AVI file formats are the most commonly used graphical formats today. Virtually every computer offers some type of support for these file formats which make them the most ideal formats to use.

JPG Optimized for compressing full-color or grayscale photographic images, .JPG images are 24-bit (16.7 million color) graphics. Use .JPG to export a single image or frame.

AVI .AVI image data can be stored uncompressed, but it is typically compressed using a Windows-supplied or third party compression and decompression module called a codec. .AVI is used to export a video clip.

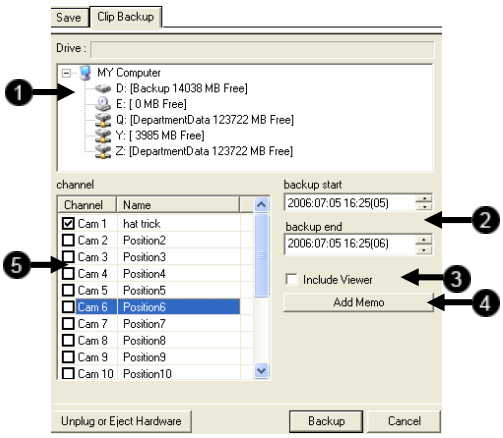


1	**Export Type**	Export a single image or .AVI video clip. (The user may choose the format for the image, different formats provide different file-sizes, quality and compatibility)
2	**AVI Duration**	Enter duration (in seconds) for recording the .AVI file. Although 100 is the longest displayed, a manual time may be entered.
3	**Compression Codec**	Choose the codec with which to encode the .AVI file. Each codec provides different levels of quality, compatibility and file-size.
4	**Image Quality**	It may be necessary to reduce the overall size of an .AVI file; for example, to email to someone. .AVI file sizes can be reduced by reducing the image quality. However, reducing the image quality causes the .AVI video to appear more pixilated. When size is not an issue, setting quality to 100 is highly recommended.
5	**Export**	Begins the saving process. (Cancel Button exits without exporting.)

SINGLE CLIP BACKUP

Along with the Save option, a single camera backup option is also included with the Surveillix software. The single Camera or Clip Backup allows the user to backup a single camera without having to backup multiple cameras at a given time. The Clip Backup option gives the users the ability to choose a backup time frame, choose a specific camera, add memos, and even make a copy for the Backup Viewer if needed.

1	**Drive**	Selects the drives data will be saved on.
2	**Backup Start/End**	Sets the time that the Clip Backup will start and end.
3	**Include Viewer**	Saves a copy of the Backup Viewer software with the exported video.
4	**Add Memo**	Displays a Clip Information Menu for entering information to be stored and displayed with the backup.
5	**Channel**	Selects the camera channels that will be backed up.



PRINTING AN IMAGE

1. Using the Search screen locate a frame to print. Double-click the image.

NOTE: Only one camera can be selected at a time for this function to work.

2. Click the Print Button. A Print Options window appears. Depending on the printer being used, there may be several printing options available. Refer to the printer manual for more information.

3. Click the Print Button to print the selected images.

NOTE: The message "NO DEFAULT PRINTERS INSTALLED" will display if no printer is installed.

PERFORMING A BASIC SEARCH

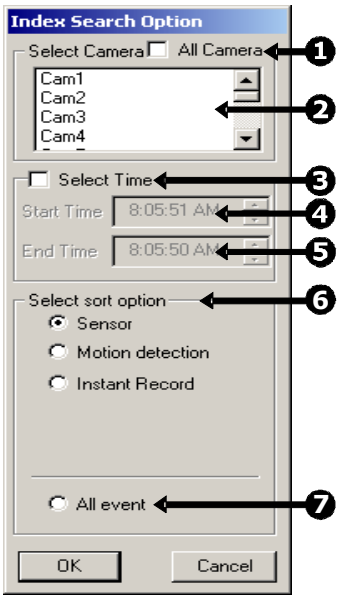
There are several different types of searches that can be performed on the XVR unit. The most basic involves selecting the date, the time, the camera, and clicking play.

1. Select a date using the calendar button in the Date Box.
2. Select a time by clicking the up and down arrows to the right of the time display.
3. Click OK.
4. Select one or more cameras.
5. Click Play. Video can be played forwards, backwards, or frame-by-frame.

INDEX SEARCH

Using the Index Search can greatly decrease the amount of time spent searching through saved video. The Index Search allows a user to perform a search based on criterion such as Sensor, Motion and Instant Record events

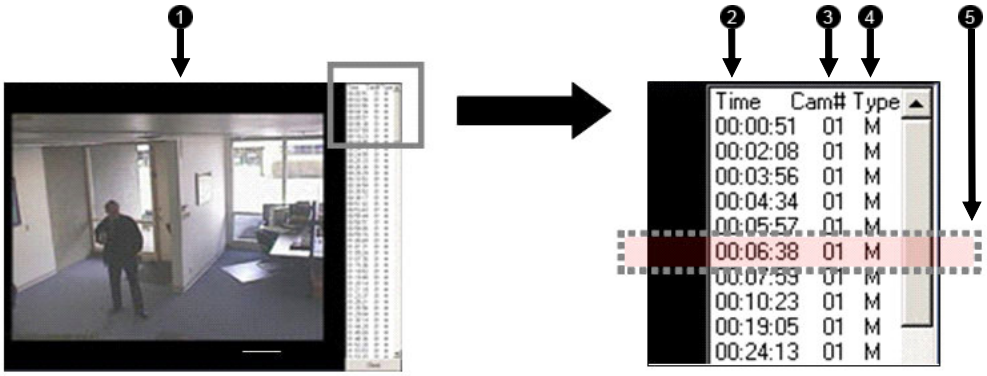
1	**All Camera**	This option selects all cameras.
2	**Multiple camera search**	Select one or more cameras to search.
3	**Select Time**	The default search time is 24 Hours. If this option is selected, a Start Time and End Time must be entered.
4	**Start Time**	Specifies the Start Time for the Index Search.
5	**End Time**	Specifies the End Time for the Index search.
6	**Sort Option**	Searches by the selected event: Sensor, Motion Detection or Instant Record.
7	**All Event**	Searches on all events (sensor, motion, instant recording) for the selected camera(s).



Performing an Index Search

1. Select the Index Search Button. The Index Search Option Box will open.
2. Select a single camera or check the All Cameras option.
3. Select an event to search (sensor, motion, instant record) or select the All Event option.
4. Click OK. There may be a delay while results are returned. Results will be displayed in a column on the left side of the screen. If no results are found, "NO IMAGE FOUND" will appear in the column.
5. Once the results are displayed, double-click on any one to search through them.
6. Once the desired image is found, apply it to the Main Search by selecting the Close Button at the bottom of the results column.

Index Search Results Display



1	**Image Display Area**	Displays search result images
2	**Time**	Time of the search result.
3	**Camera Number**	Camera number of the search result.
4	**Type**	Displays event type: M – Motion S – Sensor IR – Instant Record
5	**Search Results**	Displays the results of the search. Each line represents a segment of video.

PREVIEW SEARCH

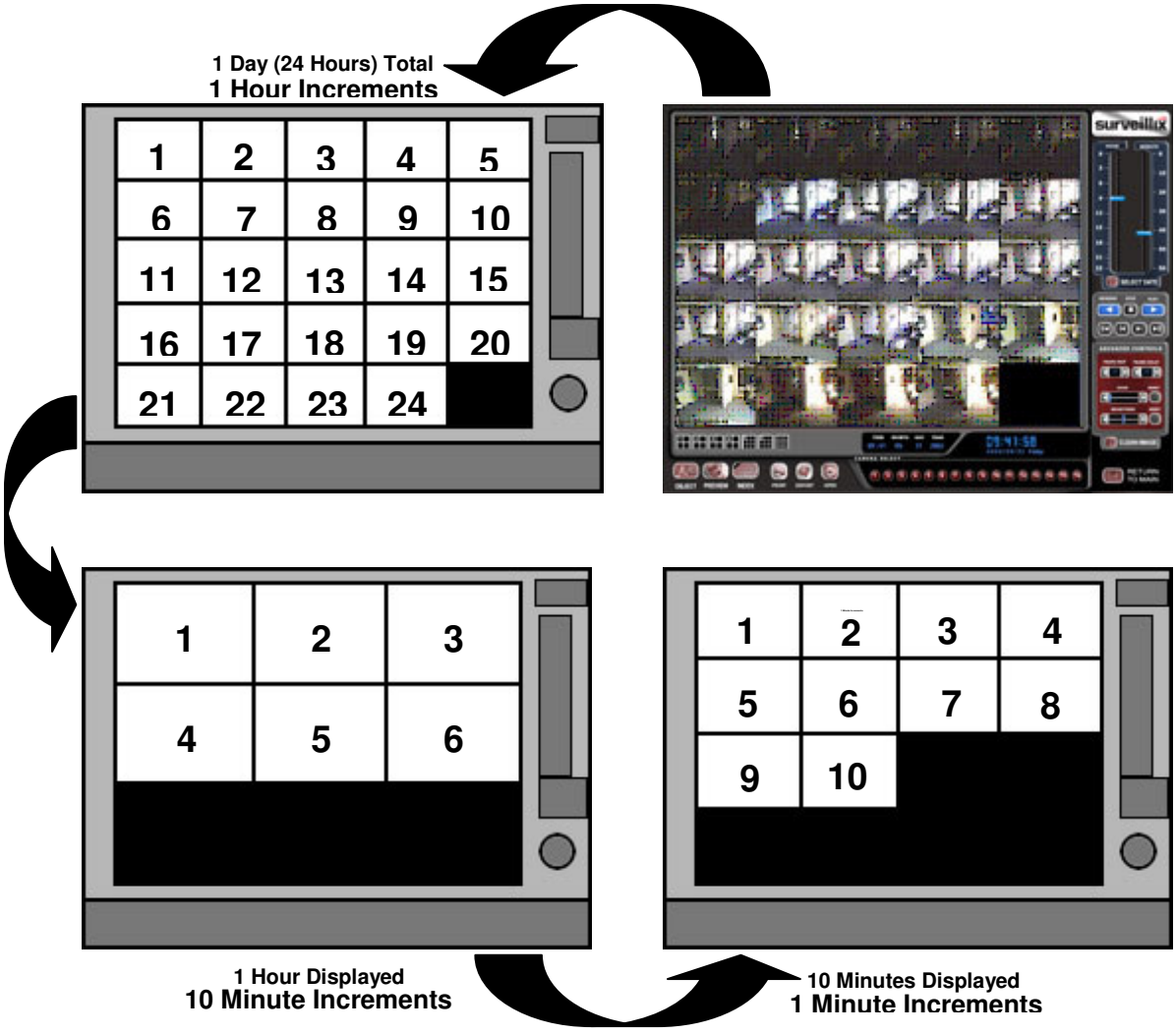
Preview Search can be used in a number of circumstances to quickly find an exact moment where an event, such as a theft, occurred. The Preview Search gives a 24 Hour visual overview of a single camera by separating a 24 hour period (1 day) into 24 images, one image for each hour of the day. The search can then be further narrowed down into ten minute increments and one minute increments by selecting one of the images displayed.

These example images show how the Preview Search functions.

The first screen that appears has 24 images displayed. Each image represents the first second of each hour. If there is no image recorded during that period then nothing will be displayed.

When an hour is selected (by double clicking on the image), a new screen appears with 6 images. Each of these images represents a 10 minute segment of video within the selected hour.

Once a 10 minute segment is selected (by double-clicking on the image) the final screen appears which breaks down that 10 minute segment into 1 minute increments (10 images).

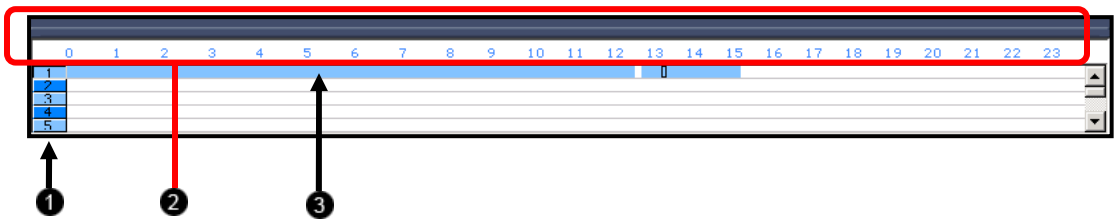


Performing a Preview Search

1. Select a single camera by either turning off all cameras but one or double-clicking a displayed image.
2. Select the Preview Search Button. 24 images display. If there is no recorded video during a portion of the day, “No Image” will be displayed where the image should be.
3. Refine the search by double-clicking on an image to select it. 6 images display. If needed, return to the previous 24-image view by right-clicking on an image.
4. Refine the search by double-clicking on an image to select it. 10 images display. If needed, return to the previous 6-image view by right-clicking on an image.
5. Double-click an image to select the 1-minute segment of video to play. A single image displays. If needed, return to the previous 10-image view by right-clicking on an image.
6. Use the Play controls to play the video of the selected segment.
7. To exit out of the Preview search with the current image still selected, deselect the Preview Search Button.

GRAPHIC SEARCH

The Graphic Search option displays video in graph format.



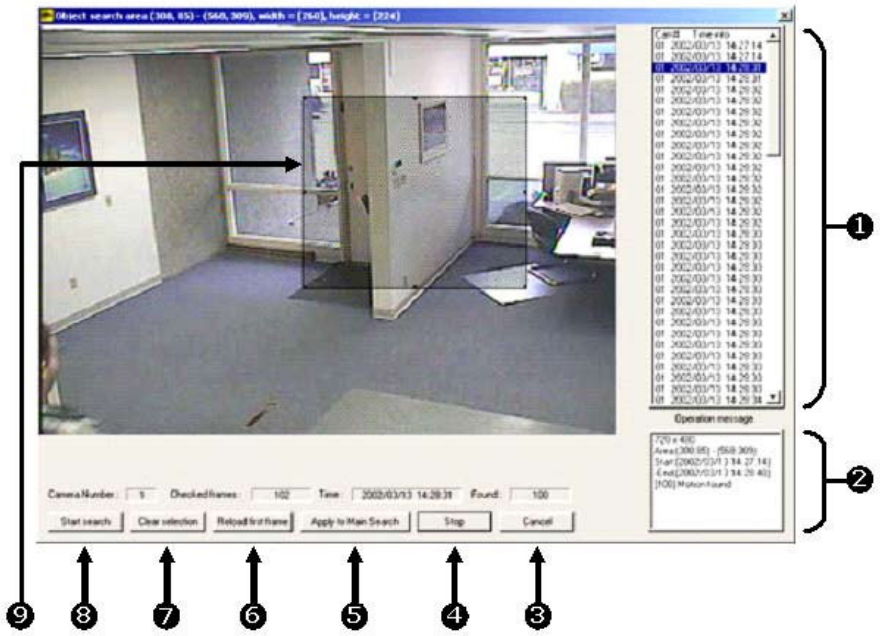
1	**Camera**	Displays the cameras in a linear format; scroll down using the scroll bar on the right
2	**Hours**	The hours 0-23 are listed (24 hours).
3	**Recording Block**	Displays blocks of time with recorded video in blue. No recording will be displayed in white

Performing a Graphic Search

1. Select the Graphic Search Button
2. Click the calendar icon to select a day
3. Click on an area of the blue recording block. Only one camera can be displayed at a time.
4. Recorded video from the corresponding camera and time block will display above
5. Use the mouse or arrow buttons to move through recorded data

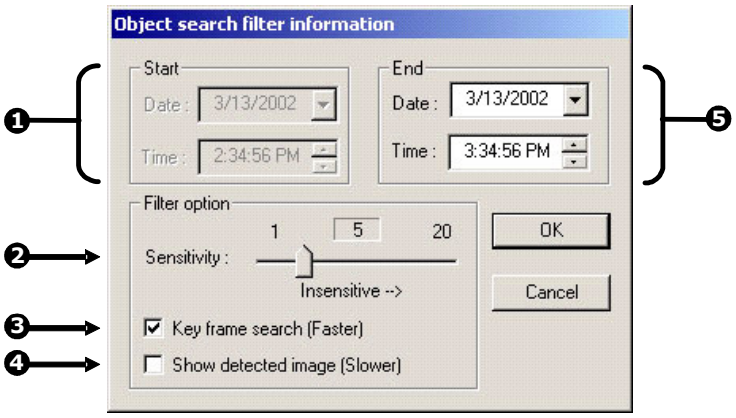
OBJECT SEARCH

Object Search is a powerful Search utility that is used to search a region on the video for any motion changes. Results are neatly displayed and can be viewed quickly.



1	**Search Results**	Search results are displayed in this column and listed by date and time. When the search is complete, results can be viewed by double-clicking on one of the results or by using the ↑ and ↓ arrow keys on the keyboard.
2	**Search Information**	Displays brief information on the overall search.
3	**Cancel**	Exits the Object Search.
4	**Stop**	Stops the current search.
5	**Apply to Main Search**	Exits the Object Search but takes the selected result (currently displayed image) and displays it inside the Main Search. From that point, play controls can be used.
6	**Reload First Frame**	Reloads the initial key frame image (the image used to start the search).
7	**Clear Selection**	Clears the current motion region box from the key frame image.
8	**Start Search**	Begins the search.
9	**Motion Region Box**	The user-defined area of the key frame image. Create the motion region box by clicking inside the image and dragging the mouse. The motion region box can be resized by pulling on the small square boxes located on the outer perimeter of the box.

Object Search Filter Information



1	**Start**	Displays the time and date of the initial key frame.
2	**Sensitivity**	Used to control sensitivity of the motion to be detected. Poor lighting conditions can often be interpreted as motion; the sensitivity setting can compensate for this.
3	**Key Frame Search**	Searches by key frame.
4	**Show Detected Image**	Displays the results as they are found. Using this option slows the search process slightly and therefore may not be ideal when searching large periods of time.
5	**End**	Used to designate an end time. (Default is 1 hour.)

Performing an Object Search

1. Perform a Basic Search
2. Select a single camera, either by turning off all cameras but one or by double-clicking a displayed image.
3. Select the Object Search Button.
4. Create a motion region box on the image by clicking inside the image and holding down the left mouse button while dragging the pointer. When the desired shape is created, let go of the mouse button. Only one motion region box can be created. To delete the motion region box, click the Clear Selection Button.
5. Click the Start Search Button. The Object Filter Search information should open.
6. Select an end time. One hour is the default setting.
7. Adjust the sensitivity if necessary.
8. Click OK to begin the search. When results are found, they will be displayed in the column to the right. If no results are found, the search will end and "No Images Found" will display in the column. Click Stop to stop a search.
9. When the search has ended, double-click on one of the results. Use the up and down arrows to scroll through the results quickly.
10. When the desired image is found, select Apply to Main Search to use the play controls.

AUDIO PLAYBACK

Audio is played back at 48,000Hz. To play audio with the video:

1. Select a single camera by turning off all cameras but one using the Camera Select Buttons. The audio buttons will be displayed.
2. Select a single audio channel to play. When an audio channel is selected, the Time Sync Button will be automatically selected.
3. Click Play.

PAN / TILT / ZOOM

This chapter includes the following information:

- Overview
- Setting up the PTZ
- Creating and Viewing a Preset Position
- Creating and Viewing a Preset Pattern

PAN / TILT / ZOOM OVERVIEW

The PTZ controls within the XVR unit allow for powerful control over the cameras. This can be extremely beneficial by increasing the usefulness of the recorded video. Using the PTZ controls you can create custom preset configurations that can continuously sweep across large areas.

SETTING UP A PTZ CAMERA

Setting up a PTZ Camera is simple. The XVR unit comes preassembled with an internal PTZ adapter. The cabling may be run up to 2,000 ft using 22 Gauge Twisted Pair.

It is important to understand how the PTZ connects to the XVR. The XVR outputs an RS-232 signal and converts in to an RS-422/485 signal which is then sent to the PTZ camera.

Attaching the RS-485 Adapter

Refer to the Connections section of this manual for information on connecting the PTZ camera to the XVR

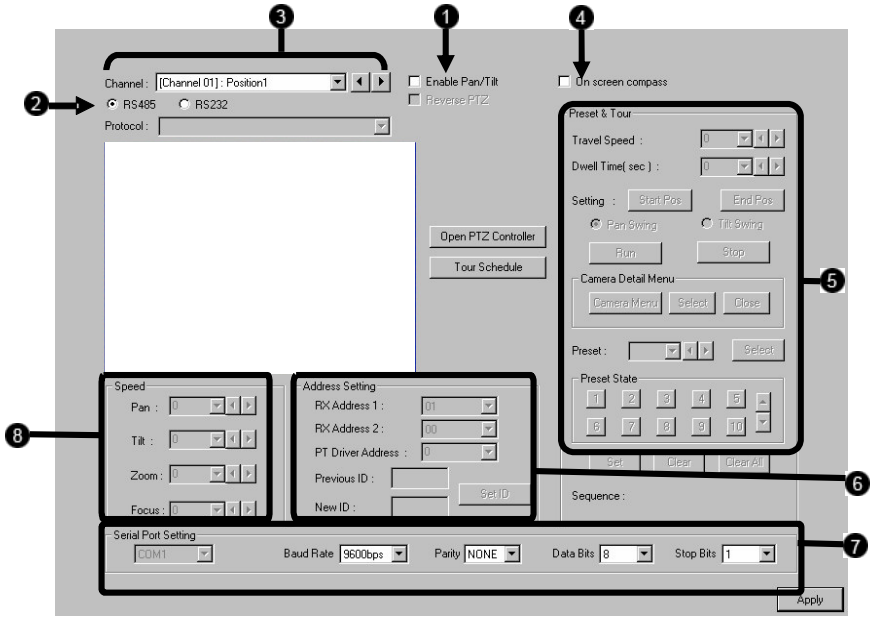
Enable the PTZ Settings

1. Inside the XVR PTZ Setup, select the PTZ camera using the Camera Channel drop down menu.
2. Enable the PTZ functions of the camera by placing a check in the Enable Pan/Tilt Checkbox.
3. Select the appropriate Protocol and set the PTZ Driver Address and Serial Port Settings (See Advanced PTZ Setup in the chapter).

NOTE: The majority of major PTZ manufacture protocols are included in this software. Refer to the Supported Protocols list in this manual.

4. Click Apply and Exit Setup.
5. From the Main Display Screen select the PTZ Button (See the chapter on XVR Basics) The PTZ Controller will open.
6. Select the PTZ camera to control by clicking on its video on the main display screen. The camera number will appear inside the PTZ controls.
7. Using the PTZ controls, move the PTZ around.

ADVANCED PTZ SETUP



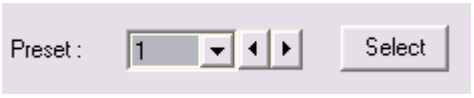
1	**Enable Pan/Tilt**	Enables the XVR to control the PTZ camera.
2	**RS-232 / RS-485**	Defines how to send the PTZ signal to the camera.
3	**Select Camera**	Selects the current camera to be edited.
4	**On-Screen Compass**	Allows on-screen control of a PTZ camera.
5	**Preset and Tour**	Used to create Presets and Tours for the PTZ camera. Since each camera creates these in a different way, there can be multiple methods.
6	**Address Setting**	Only available on select PTZ cameras. These options need to be set when there are more PTZ cameras connected together than there are inputs on the XVR. Setting these options allows for attaching several XVRs to the PTZ chain.
7	**Serial Port Settings**	Defines the specific settings to transmit to the PTZ.
8	**Pan Speed** **Tilt Speed** **Zoom Speed** **Focus Speed**	Increases or decreases the Pan speed. Increases or decreases the Tilt speed. Increases or decreases the Zoom speed. Increases or decreases the Focus speed.

CREATING AND VIEWING PRESET POSITIONS

A Preset Position is a user-defined location where the camera can be pointed, zoomed in, and focused. Preset positions can be defined and labeled if the camera supports this.

Creating a Preset

1. Inside Setup, select the PTZ setup option and select the camera wish to edit.
2. If the camera is already selected click Open PTZ Controller
3. Move the selected camera to the desired position using the Pan/Tilt/Zoom/Focus controls.
4. Inside the Pan Tilt Detail Setup choose a Preset (1-10) using the drop down menu or the Right and Left Arrow Buttons and click Select.

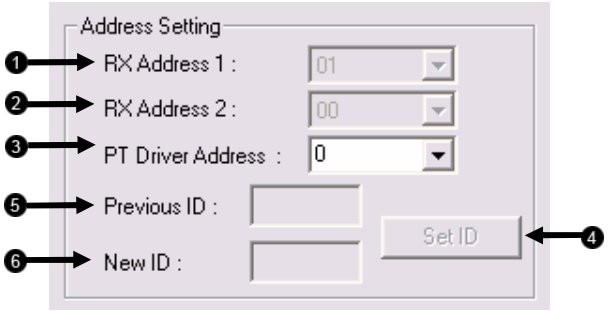


Viewing a Preset

1. From the Main Display Screen select the PTZ camera by clicking on it.
2. Using the keyboard click the number keys corresponding with the Preset Positions. The Camera will move to the saved Preset.

PTZ ADDRESS SETTINGS

Some protocols support software address settings. The following section explains these settings.



1	**RX Address 1**	This option was added for a particular line of receivers that support 2 ID addresses. This is the first RX address.
2	**RX Address 2**	This option was added for a particular line of receivers that support 2 ID addresses. This is the second RX address.
3	**PT Driver Address**	This option is for specifying the PTZ ID address that the PTZ is set to. This option must be set correctly in order for the XVR to communicate with the PTZ. This option can be beneficial when large amounts of PTZ are chained together.
4	**Set ID**	This option was added for a particular line of receivers that support 2 ID addresses. This option is for setting the new RX address.
5	**Previous ID**	This option was added for a particular line of receivers that support 2 ID addresses. This option displays the current RX address ID.
6	**New ID**	This option was added for a particular line of receivers that support 2 ID addresses. This option is for entering a new RX address ID.

ACCESSING PTZ MENUS

Some protocols support the ability to access the Internal PTZ Onscreen Menu

1	**Camera Menu**	Menu opens the PTZ Camera Menu.
2	**Select**	This option selects an item on the Onscreen Menu.
3	**Close**	Close closes the Onscreen Menu
4	**Up / Down**	The Up and Down buttons on the PTZ controller move through the PTZ Menu options.
5	**Left / Right**	The Left and Right buttons on the PTZ controller move through the PTZ Menu options and/or highlight options.

Since every PTZ camera is different, the functions of these options can vary slightly.

The Surveillix XVR provides an easy way to access the cameras options. For explanations of what those options are please refer to the manual that came with the camera

CONTROLLING A PTZ CAMERA

The Surveillix XVRs provide control for a PAN/TILT camera in two different ways.

The first method is to use the Graphical PTZ Controller that appears when the PTZ Button is clicked on the main screen.

The second method is to use the mouse to control the camera directly from the live video display.

Using the Graphical PTZ Controller

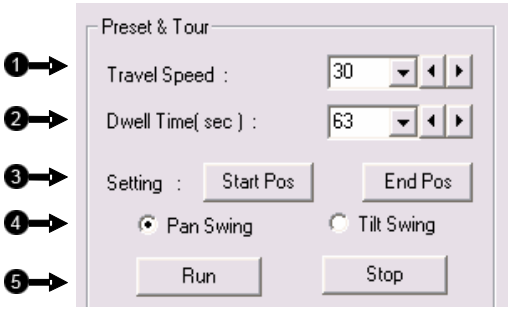
1	**PTZ Controls**	There are 8 directional buttons that move the PTZ.
2	**Zoom**	This option zooms the camera in and out.
3	**Focus**	This option focuses the PTZ camera.
4	**Iris**	This option adjusts the Iris on the PTZ.
5	**Light**	This option activates the Light on the PTZ.
6	**PTZ Presets**	These buttons activate a corresponding PTZ Preset.
7	**Select**	This option selects an item on the on-screen menu.
8	**Preset Setup**	Create preset positions using the arrows above and these buttons to assign the number and Set the position.
9	**Menu**	This option opens the PTZ Camera Menu.
10	**Tour**	This option activates the Tour function.
11	**Wiper**	This option activates a Wiper on the PTZ camera.
12	**Camera Number**	This displays the camera number you are currently controlling. To change the camera, click on the video of the camera to control.
13	**Move**	Moves the PTZ Controller.
14	**Close**	This option closes the PTZ Onscreen Menu.

NOTE: Eight Directions are available only for select protocols. Only four of the PTZ Control buttons work for all protocols (UP, DOWN, LEFT, RIGHT).

Using the On-Screen Compass

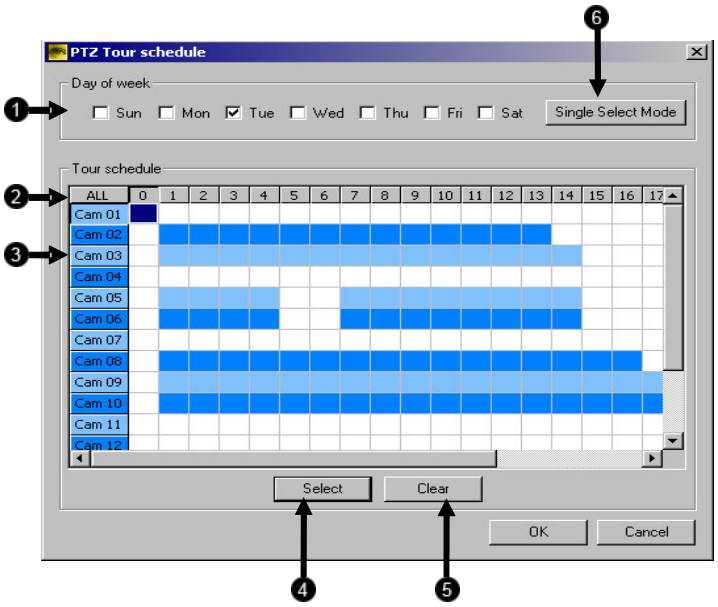
1. Click the PTZ Button on the main screen.
2. Control the PTZ by dragging the mouse on the screen in the desired direction. A green line will appear to show the direction the PTZ will move. The shorter the line the less the PTZ will move. The longer the line the more the PTZ will travel in the specified direction.

UNDERSTANDING TOURS



1	**Travel Speed**	This option defines the speed at which a PTZ moves from one Preset position to the next (when using Preset Tour 2).
2	**Dwell**	This option defines the length of time (in seconds) that a PTZ Tour stays on a Preset Position. Moves from one Preset position to the next (when using Preset Tour 2).
3	**Setting: Start Pos / End Pos**	These options describe how to define a Mimic Tour. The Start Position Button begins the 'recording' process. The Stop Position Button ends it.
4	**Pan Swing / Tilt Swing**	This option enables the Horizontal (Pan) or Vertical (Tilt) 'Guard Tours'.
5	**Run / Stop**	Runs the selected Pan or Tilt Tour.
6	**Tour Schedule**	Opens the PTZ Tour schedule

PTZ Tour Schedule



1	**Day of Week**	Specify which day of the week will be altered in the tour schedule.
2	**All**	Allows all cameras and all hours of the day to be selected.
3	**Camera Selection**	Shows the set schedule for each camera, by clicking the camera name all hours can be selected for the camera.
4	**Select**	Applies a tour for the areas that the user has highlighted.
5	**Clear**	Allows the user to clear the designated area that has been selected.
6	**Multi/Single Select**	Multiple Select Mode allows for multiple days to be selected and have a specified tour schedule applied. Single Select Mode allows the user to customize single days.

BACKING UP VIDEO DATA

This chapter includes the following information:

- Overview
- Saving Video to a DVD±RW
- Saving Video from a single camera
- Scheduling Regular Video Backup

BACKUP OVERVIEW

The XVR can easily backup important video data to an internal or external media location. The most commonly used forms of this are DVD-ROM-R/RWs, External USB or FireWire Hard Drives, and Network Drives. Every XVR unit comes standard equipped with a DVD±RW drive, USB port, and Network Adapter.

The XVR is capable of performing a backup to multiple DVDs when the file sizes exceed the capacity of a single disk. You may also specify multiple locations for backup as well as the order they are recorded to.

The XVR backs up video data using a proprietary compression format that can only be read by the XVR Backup Program. This ensures the integrity of the data.

Throughout the backup process the XVR will continue recording without interruption. This is the result of the tremendous multiplexing power of the XVR unit which allows it to perform virtually all functions without disrupting the recording process.

NERO® EXPRESS

The XVR unit uses Windows® XP® Embedded running Nero® Express 6.0 to write data to the DVD-ROM Drive. This solution allows the XVR software to read and write data to the DVD-ROM Drive without the requirement of formatting the disk first.

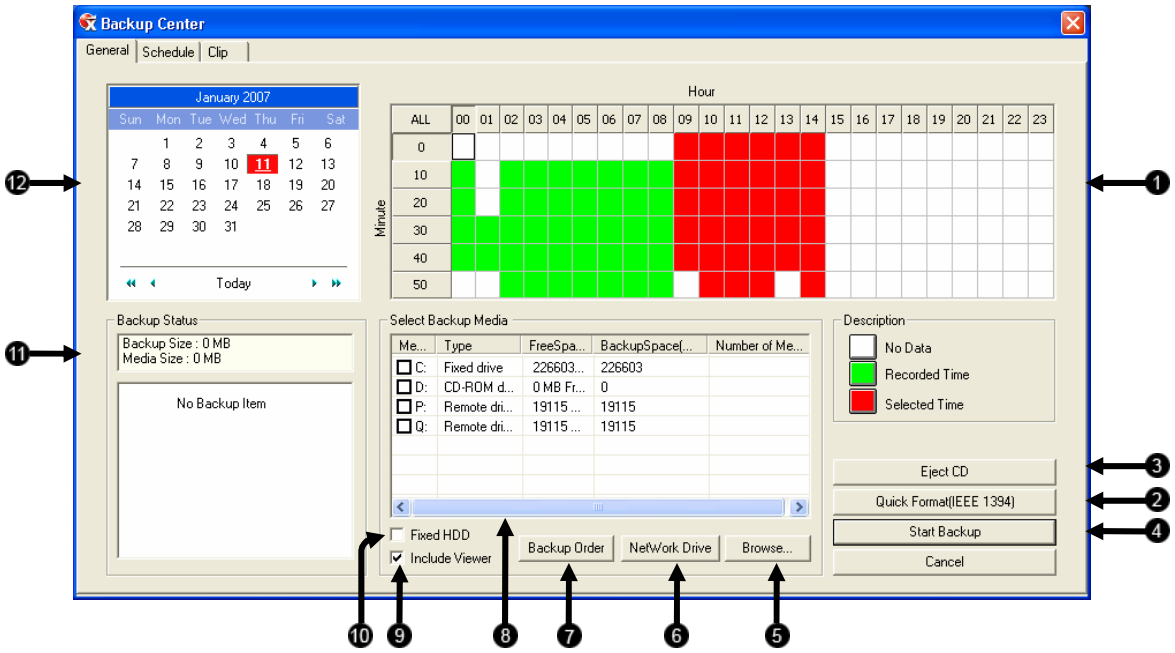
CAUTION: Although many features are available within Nero, it is highly recommended that you do NOT use any features other than those necessary for the standard backup of video data as outlined in this section, loss of information or software instability may result.

BACKUP CENTER OVERVIEW

The Backup Center allows you to back up recorded video data from multiple dates and times to one or more locations including the DVD-ROM drive, Network Storage Locations, and External Hard Drives.

General Backup Screen

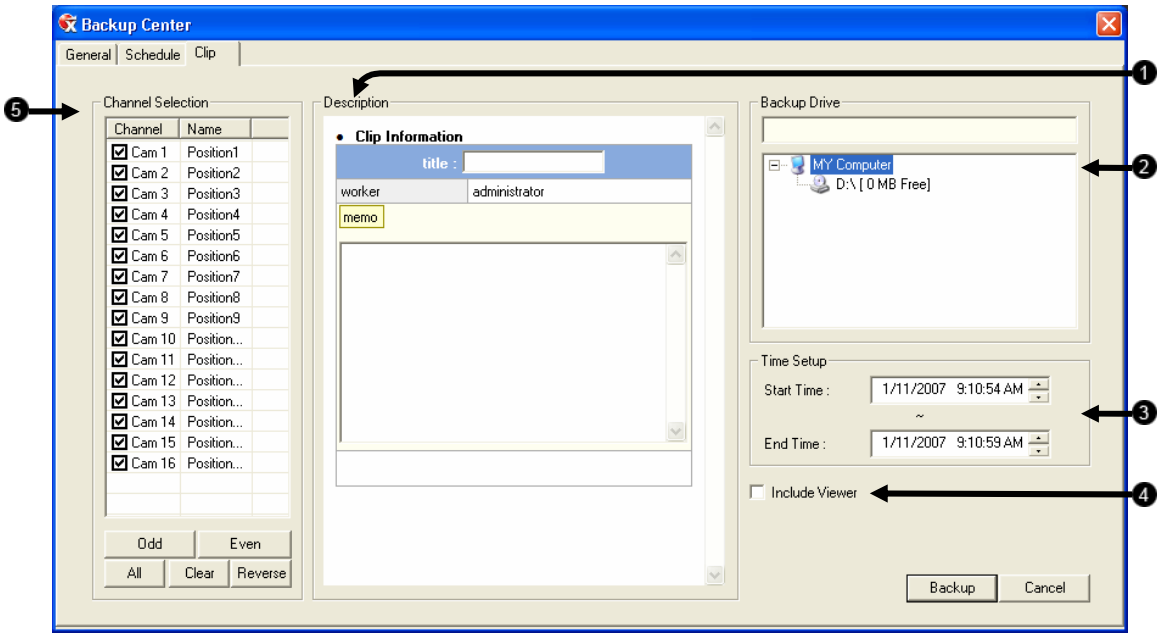
The General Backup Screen is used for performing bulk backup of video recorded by all cameras for a selected period or periods of time to a specified storage location.



1	**Hour / Minutes**	Displays recording data in hourly (24 horizontal columns) and 10 minute (6 vertical cells) segments. Green cells indicate time with recorded video. Red cells indicate time selected for backup.
2	**Eject DVD-ROM**	Ejects the DVD-ROM from the System.
3	**Quick Format IEEE**	Performs a quick format of the attached IEEE (1394) device.
4	**Start Backup**	Initiates the backup process.
5	**Browse**	Opens a menu for adding backup drives or folders not displayed in the Select Backup Media Menu.
6	**Network Drive**	Allows browsing to and selecting of a remote network location for backing up video to.
7	**Backup Order**	Allows setting of the order in which drives are used for backing up data to.
8	**Select Backup Media**	Allows selection of drives and folders to back up video to.
9	**Include Viewer**	When checked, copies the Backup Viewer application onto the DVD-ROM or DVD being used for backup and sets the disc to auto run the viewer.
10	**Fixed HDD**	When checked, displays all hard drives on the system.
11	**Backup Status**	Displays the size of all video currently selected for backup, the available size of the media currently selected for backup to, and the dates and times of video currently selected for backup.
12	**Calendar**	Select a date to back up video from; blue highlights indicate dates with recorded video in them.

Clip Screen Overview

The Clip Screen is used for backing up video recorded by individual cameras for a selected period of time to a specified storage location



1	**Description**	Enter information to be stored and displayed with the backup.
2	**Backup Drives**	Selects the drive to backup video to.
3	**Time Setup**	Sets the start time and stop time of the video being backed up
4	**Include Viewer**	When checked, copies the Backup Viewer application onto the DVD used for backup and sets the disk to auto run the viewer
5	**Channel Selection**	Sets individual cameras for backup. With buttons for selecting odd, even, all, or reversing the current camera selection.

PERFORMING A GENERAL BACKUP

1. Click the Backup Button on the Main Display Screen.
2. Select the date or dates to back up video from using the calendar. Dates highlighted in blue contain recorded data.
3. Select the blocks of time to back up using the Hour/Minute Menu. Blocks of time with recorded video are highlighted in green. Blocks of time selected for backup are highlighted in red.
4. Select the drive or drives to save the backup video to using the Select Backup Media Menu, Network Drive Button, or Browse Button. When selecting the DVD-ROM Drive you must specify the number of DVDs to use for backup.
5. Set the backup order using the Backup Order Button.
6. Select the Include Viewer Checkbox to include the Backup Viewer Application.
7. Click the Start Backup Button to begin the backup process. A progress bar will be displayed in the lower right corner of the main screen.

PERFORMING A CLIP BACKUP

1. Click the Backup Button on the Main Display Screen.
2. Click the Clip Backup Tab at the top of the Backup Center Screen.
3. Set the Backup Time and End Time of the video to backup in the Time Setup Box.
4. Select the Cameras to back up in the Channel Selection Box.
5. Select the Backup Drive to save the backup video to.
6. Check the Include Viewer Checkbox to include the Backup Viewer Application.
7. Enter pertinent clip information into the Clip Information section in the Description Box.
8. Click the Start Backup Button to begin the backup process. A progress bar will be displayed in the lower right corner of the main screen.

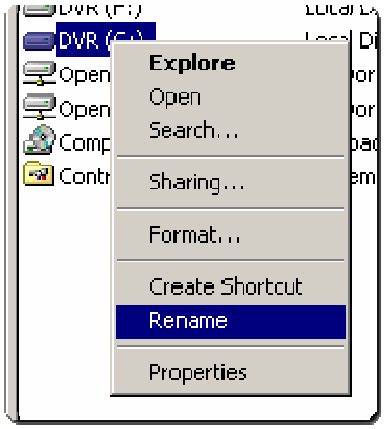
PERFORMING A SCHEDULED BACKUP

1. Click the Backup Button on the Main Display Screen.
2. Click the Schedule Tab at the top of the Backup Center Screen.
3. Set the Backup Time to perform the backup.
4. Set the Repeat Backup Time to specify the number of hours between backup procedures (between 1 and 24 hours).
5. Select the Backup Drive to save the backup video to using the Select Backup Media Menu or the Network Drive Button. To save to a local drive or partition you must first rename the location “Backup”
6. Check the Overwrite on Disk Full checkbox to overwrite previous scheduled backups when the disk becomes full.
7. Click the Save Backup Setting Button to save the current backup setting and return to the Main Display Screen.

Specifying Scheduled Backup Drives

In order to use the Scheduled Backup feature one or more storage drives or partitions connected to the XVR must be labeled as a backup drive.

1. Exit and restart in Windows mode.
2. Double click the My Computer icon on the XVRs desktop. A file menu will be displayed.
3. Right click on the drive to specify as a backup drive for Scheduled Backup and select the Rename option. Rename the drive to ‘Backup’. Repeat this process for all drives to use for Scheduled Backup. To remove a drive from use for Scheduled Backup, change its name to something besides ‘Backup".
4. Restart the application and return to the Schedule Tab in the Backup Center Window.



LAN / ISDN / PSTN CONNECTIONS

This chapter includes the following information:

- Overview
- Configuring TCP/IP Settings
- Connecting to a LAN

LAN OVERVIEW

The XVR unit can easily be connected to a Local Area Network (LAN) and uses Microsoft's® powerful and secure Windows® XP Embedded operating system. This allows for easy and well-documented instructions on setting up LAN connections no matter what type of LAN you want to use.

A LAN is a group of computers and other devices dispersed over a relatively limited area and connected by a communications link that allows one device to interact with any other on the network.

Examples of LAN connections include Ethernet, Token Ring, cable modems, DSL, FDDI, IP over ATM, IrDA (Infrared), wireless, and ATM-emulated LANs. Emulated LANs are based on virtual adapter drivers such as the LAN Emulation Protocol.

There are many reasons why using Microsoft® Windows® XP Embedded is superior to other platforms when running on a LAN. The number one reason is security. Windows XP Embedded is based on NT technology, which, historically has boasted the most reliable and secure Operating System in the world. Running the XVR on a secure network is important to prevent unwanted users from gaining access to confidential information. Unwanted users can compromise the integrity of the confidential data being stored and viewed, and in extreme circumstances can cause irreparable damage to the network.

Since connecting the XVR unit to a network can be extremely complex (depending on the network), this Surveillix XVR manual will cover only the basics. It is suggested that the administrator consult a Vendor or IT Administrator before attempting to create or connect to a LAN.

CONNECTING TO A LAN USING TCP/IP

The networking options of the XVR unit can create and edit all Network settings available on Windows XP Embedded. The XVR unit comes equipped with a 10/100 Network Interface Card (NIC). This card uses a standard RJ-45 connector.

The XVR unit comes preconfigured with an IP Address of [172.25.2.1] and a subnet mask of [255.255.0.0]. These IP settings will work for many users. If these IP settings are sufficient then re-configuring TCP/IP will not be necessary.

Configuring TCP/IP Settings

1. Exit and restart in Windows mode.
2. Right-click on the My Network Places icon located on the desktop and select Properties. The Network Connections window opens.
3. Right-click Local Area Connections and select Properties. The Local Area Connection Properties window opens.
4. Select the Internet Protocol (TCP/IP) by clicking on it once. Once it is highlighted, select the Properties Button. The Internet Protocol (TCP/IP) Properties window opens.
5. Select Use the Following IP Address option. Enter the IP Address and Subnet mask appropriate for the network. It is recommended to contact the Network Administrator for appropriate IP settings.

Example: a. Common IP addresses are 10.0.0.25

b. Common Subnet masks are 255.255.255.0

NOTE: In order to connect to the XVR unit through a remote LAN connection, a static IP address must be assigned. If the network assigns the IP address automatically (DHCP), contact the Network Administrator for help assigning a static IP address.

6. If the network requires you to specify the DNS information, enter it now by selecting the appropriate DNS options.
7. When finished configuring the TCP/IP settings close the Internet Protocol (TCP/IP) Properties window by clicking the OK Button.
8. Close the Local Area Connection Properties window by clicking the OK Button.
9. It may be required to restart Windows for the changes to take effect. Restart windows by selecting START on the desktop and selecting Restart.

Connecting the XVR to a LAN

Using a standard RJ-45 cable, plug one end into a Hub (or Network Jack ultimately connected to a hub) and the other end into the XVR unit.

WEB VIEWER

This chapter includes the following information:

- Overview
- Configuring the Web Viewer

WEB VIEWER OVERVIEW

The XVR unit allows you to access video using Microsoft® Internet Explorer® Browser 6

Highlights:

View Live Video from most computers

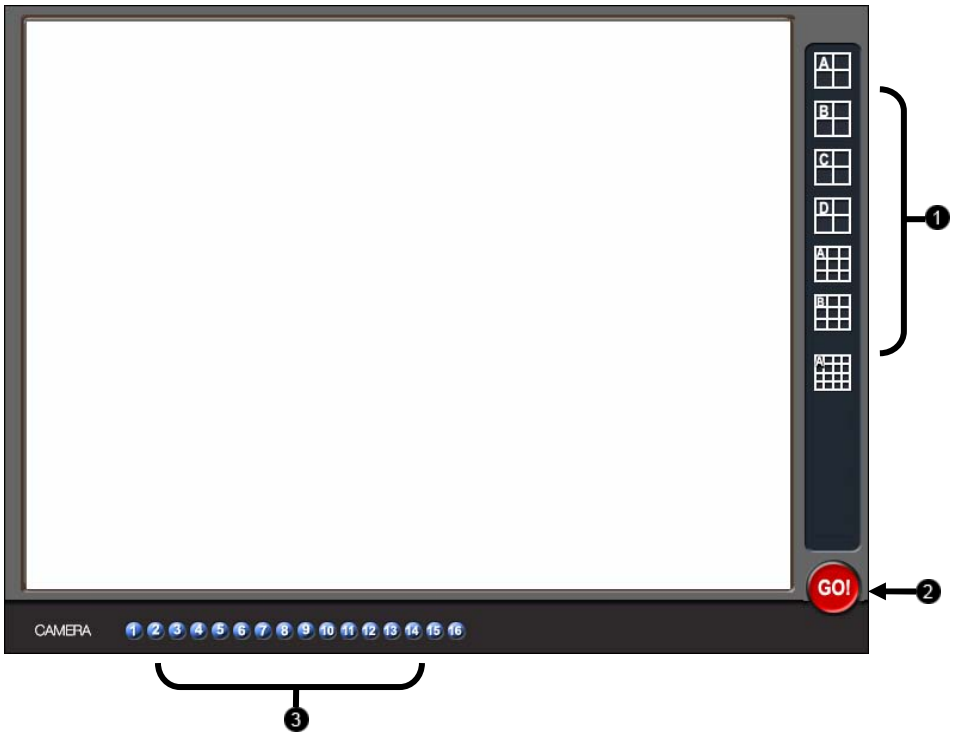
Username and Password protected

Easy to use graphical interface

Basics:

75 users can access the Web Viewer simultaneously. The Web Viewer is an easy secure way to view live video from virtually any computer with an internet connection using Microsoft Internet Explorer.

In order to log in to the XVR server, a user account must be made for the user. This ensures that only authorized personnel are allowed to log in. In addition, each user can be assigned different privileges that allow them or deny them access to different functions. For example, a user can be granted access to only view cameras 4, 8 and 16.



1	**Screen Division Buttons**	Allow you to view one or more sets of cameras at a time. They are organized in several different groups such as 1x1, 4x4, and 8x8.
2	**GO!**	Activates the commands
3	**Camera Buttons**	Enable or disable selected cameras for use when searching.

Configuring the Server for Remote Connection

1. Enter Setup on the XVR unit.
2. Click the Network Setup Button
3. Uncheck the Disable Remote Control option. You should now be allowed to adjust port settings if necessary.

NOTE: If you are using a Firewall, it may be necessary to adjust the port settings on both the XVR and the Firewall. Contact the Network Administrator for more information.

4. Click OK.
5. Make sure a User account is created. Without a user account, the Administrator account must be used.
6. The XVR server is now ready to receive incoming connections.

Connecting to an XVR Using Web Viewer

1. Open Microsoft® Internet Explorer® 6
2. Enter the IP address of the XVR into the Address Bar.
3. When attempting this for the first time on a Computer a window will open and you will be asked to accept an Active X installation. Select Yes to this.

NOTE: If you receive a message saying Internet Explorer® security settings do not allow you to download Active X components then you will need to adjust the browser security settings. One way to do this is to add the IP address of the XVR to the trusted sites list inside Internet Explorer® settings. Contact the System administrator for additional help with adjusting Internet Explorer® settings.

4. When the Web Viewer finishes loading, select one or more cameras (or select a screen division button).
5. Click GO!
6. A login window will appear. Enter the Username and Password of an authorized user.
7. The cameras will now be displayed.

Closing the Web Viewer

1. To exit the Web Viewer close Internet Explorer®.

INCLUDED SOFTWARE SETUP

This chapter includes the following information:

- Emergency Agent Overview
- Remote Software Overview
- Digital Verifier
- Backup Viewer
- SCS Multi Site Software Overview

EMERGENCY AGENT OVERVIEW

The Emergency Agent software is a utility that streams video across a Local Area Network to a Client PC when an alarm is detected on the XVR unit. The video that streams across can be stopped, played forwards and backwards, in slow motion or real speed.

The utility is loaded at startup and placed in the taskbar. It constantly monitors for a signal from the XVR unit. When an alarm signal is detected the Emergency Agent Image Viewer window opens and starts playing the video from the camera associated to the alarm.

Configuring the XVR

To enable the Emergency Agent on the XVR follow these steps:

1. Enter Setup and confirm you are in the Camera Setup Menu.
2. Select a camera and then associate sensor(s) to that camera using the Sensor Connection checkboxes.
3. Click the Network Setup Button and make sure that Disable Remote Control is not checked.
4. The Emergency Agent uses one port to transfer the data through (the Emergency Port). The port can be adjusted inside the Network Setting Menu if necessary. It is recommended that the default setting should be used unless the port must be changed.
5. Click the Schedule Setup Button. Enter the IP Address of the computer running the Emergency agent software.
6. Click the box next to the IP Address to enable it.
7. Select the Sensor Radio Button.
8. Create a schedule for the appropriate sensor
9. Click Apply.

REMOTE SOFTWARE OVERVIEW

The XVR unit was specifically designed to be fully operated and maintained remotely. It connects using the standard TCP/IP protocol thorough connection types such as DSL, Cable Mode, T1, ISDN, 56K Modem, LAN, and more. The Surveillix Remote software allows you to view live video, search through archived video, export images and video clips and have virtually full Setup control.

Highlights:

Search archived video

View live video

Export images and video clips

Control relay outputs

Setup administration

Basics:

The XVR can have up to 5 simultaneous remote connections. Each user can perform functions on the XVR unit and will not affect the other users. The only exceptions to this are accessing Setup and controlling a PTZ camera. Only one user is allowed to access setup or control a PTZ camera at any given time. The pictures per second passed to the Remote Client vary greatly depending on the connection type and speed.

In order to log in to the XVR server, a user account must be made for the user. This ensures that only authorized personnel are allowed to log in. In addition, each user can be assigned different privileges that allow them or deny them access to different functions. For example, a user can be denied Searching and Setup privileges and only granted access to view cameras 4, 8 and 16.

It is highly recommended that users not be granted Setup privileges since this can pose a security risk. Only properly authorized Administrators should have access to Setup.

The Remote software operates virtually the same way as the XVR itself. The appearance of it matches the XVR almost identically; however, there are a few minor differences. Some search features are not available (such as the Index and Object Searches) as well as some Setup options.

Remote Client Minimum Requirements

Intel® Pentium® III 750 or equivalent

32MB System Memory

DirectX 9 or higher

Compatible video card (ATI Preferable)

Internet or LAN Connection (56K, DSL, Cable Modem, T1, ISDN, etc.)

TCP/IP installed

Microsoft® Windows® 2000 or XP Operating System

1024 x 768 display resolution

16 Bit color depth or better

Remote Client Recommended Requirements

Intel® Pentium® IV 2.4+ or equivalent

512MB System Memory

DirectX 9 or higher

Compatible video card (ATI Preferable)

Internet or LAN Connection (DSL, Cable Modem, T1, ISDN, etc.)

TCP/IP installed

Microsoft® Windows® 2000 or XP Operating System

1024 x 768 display resolution

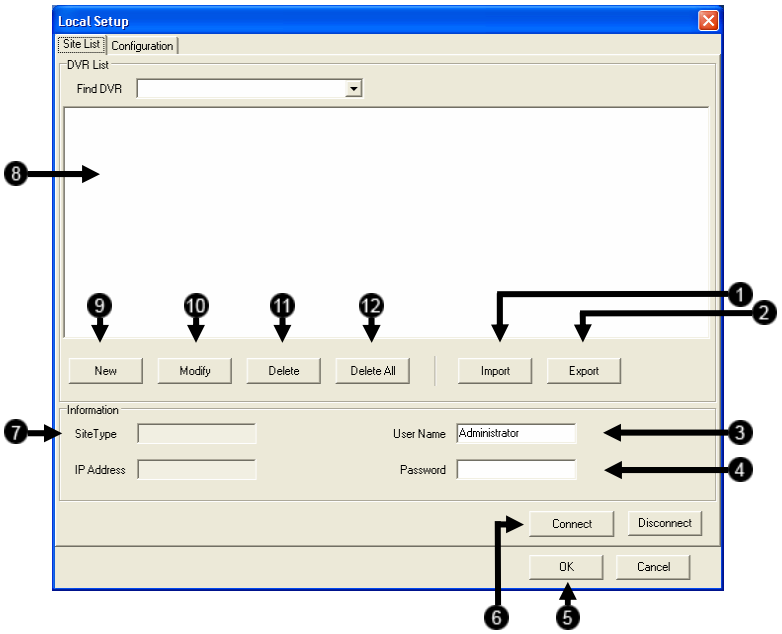
32 Bit color depth or better

Remote Software Setup

Installing Remote Software

1. On the client computer, insert the Surveillix Software DVD into the DVD-ROM. The DVD should play automatically.
2. When prompted, select the Install Remote Software option. Follow the installation instructions carefully.
3. When the software finishes installing, close any open installation windows.

Create a New Remote Connection

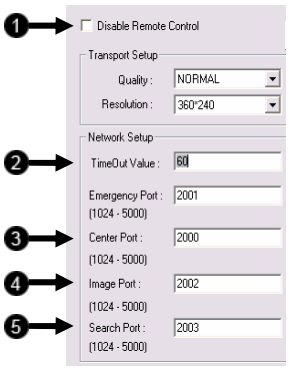


1	**Import**	Import previously saved configurations
2	**Export**	Export selected configurations
3	**User Name**	Enter the login username.
4	**Password**	Enter the login password.
5	**OK Button**	Click to exit window without connecting
6	**Connect**	Connects the Surveillix Remote Client to the Server.
7	**Information**	Displays the Site Type and IP Address of selected DVR
8	**Site**	Displays a list of pre-configured sites.
9	**New**	Creates a new site to connect to.
10	**Modify**	Used to modify settings of a site selected from the list.
11	**Delete**	Deletes the selected site
12	**Delete All**	Deletes all listed sites.

1. Select Start > Programs > Surveillix > Remote > Surveillix Remote Center. The Surveillix Remote Software opens and the Local Connection Window opens.
2. Click New to open the Site Info window.
3. Select the Site Type and enter a Site Name. The Site Name will be the name displayed inside the connection box to help identify the unit.
4. Enter the IP Address of the DVR server. By default the DVR unit is set to connect using DHCP.
5. Enter the Center Port. This setting is specified on the server.
6. Click OK.
7. Click on the newly created connection and enter the login username and password. (case sensitive)
8. Click Connect.

Configuring the XVR

In order to access the XVR unit remotely, the XVR Server must be setup to allow remote connections.



1	**Disable Remote**	Enables/Disables acceptance of remote connections by the XVR server.
2	**Time Out Value**	Specifies a value (in seconds) to wait for a signal from the Surveillix Remote Client. If a signal is not received by that time, the connection is dropped.
3	**Center Port**	Used by the XVR to transfer the connection data.
4	**Image Port**	Used by the XVR to transfer the image data.
5	**Search Port**	Used by the XVR to transfer the search data

Configuring the Server for Remote Connection

1. Enter Setup on the XVR unit.
2. Click the Network Setup Button to open the Network Menu.
3. Uncheck the Disable Remote Control option. You should now be allowed to adjust port settings if necessary.

NOTE: If you are using a Firewall, it may be necessary to adjust the port settings on both the XVR and the Firewall. Contact the Network Administrator for more information.

4. Click OK.
5. Make sure a User account is created. Without a user account, the Administrator account must be used.
6. The XVR server is now ready to receive incoming connections.

Access Remote Connection

1. Open the Remote Software
2. Click on the icon of the server as defined previously
3. Enter the user name and password of an authorized remote user as defined in Network > Client Setup > User Account on the E-Series system.

NOTE: User Name and Password are both case sensitive

4. Click the Connect Button

DIGITAL VERIFIER OVERVIEW

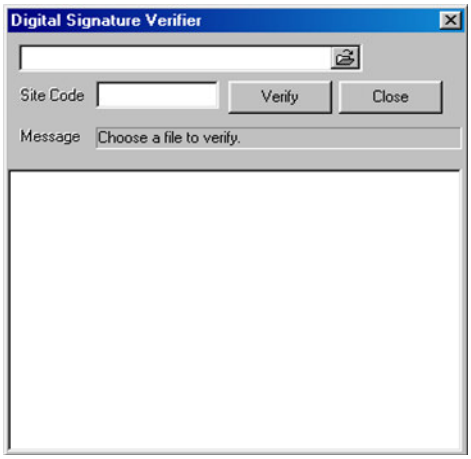
.JPG images and .AVI video files that are exported from the Digital Video Recorder are automatically embedded with a digital signature. Digital Signatures are a way to verify the authenticity of the images to ensure that they have not been tampered with or edited in any way. Included on the Software Installation DVD supplied with the XVR unit is the Digital Signature Verification program. This program can be installed on any computer and loads an image in question.

Installing the Digital Verifier

1. Insert the Software Installation DVD into the DVD-ROM. (Do not install on the XVR unit.)
2. Select the Digital Verifier option to begin installation. When the Welcome screen appears, click Next.
3. When the Setup Complete window appears click Finish. Installation is complete.

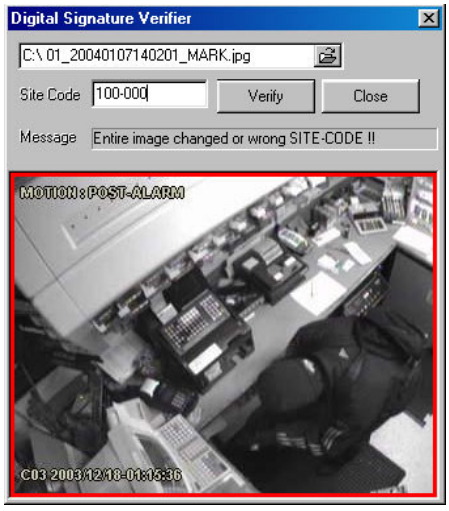
Using the Digital Verifier

1. Open the Digital Verification program by selecting Start > Programs > Surveillix > Digital Verifier > Digital Signature Verifier.
2. Click the Browse Button to load the .JPG image.
3. Enter the Site Code of the XVR unit that the image was originally extracted from. (The Site Code is specified in the Site Information Setup Menu)
4. Click the Verify Button to continue or Close to close the window without verifying.



If the image has not been tampered with, a blue square will appear around the image with the message "Original image file."

If the image has been tampered with, a red square will appear around the image with the message "Entire image changed or wrong SITE CODE."



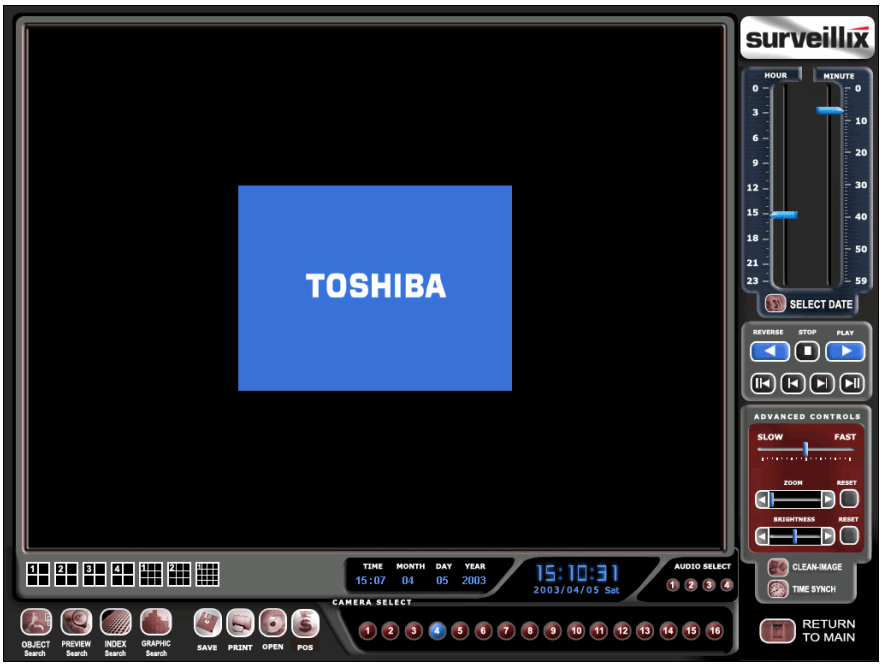
BACKUP VIEWER OVERVIEW

The Backup Viewer allows you to play back the exported video in its proprietary format. Video saved in this format is extremely difficult to tamper with and therefore is the ideal solution when law enforcement and the legal department are involved.

This video cannot be read by any other viewer.

The Backup Viewer operates essentially like the Search portion of the XVR software.

For detailed explanations of these functions, refer to the chapter on Search Options in this manual.



Installing Backup Viewer

1. Insert the Software Installation DVD into the DVD-ROM.
   (Do not install on the XVR unit.)
2. Select the Backup Viewer option to begin installation.
   When the Welcome screen opens, click Next.
3. Read the License Agreement and select the appropriate radio button to accept the terms of the license agreement.
   Click Next.
4. Select Yes to install the POS component or Select No for a basic install.
   Click Next.

NOTE: The POS component is only necessary when connecting to a server running the POS Upgrade

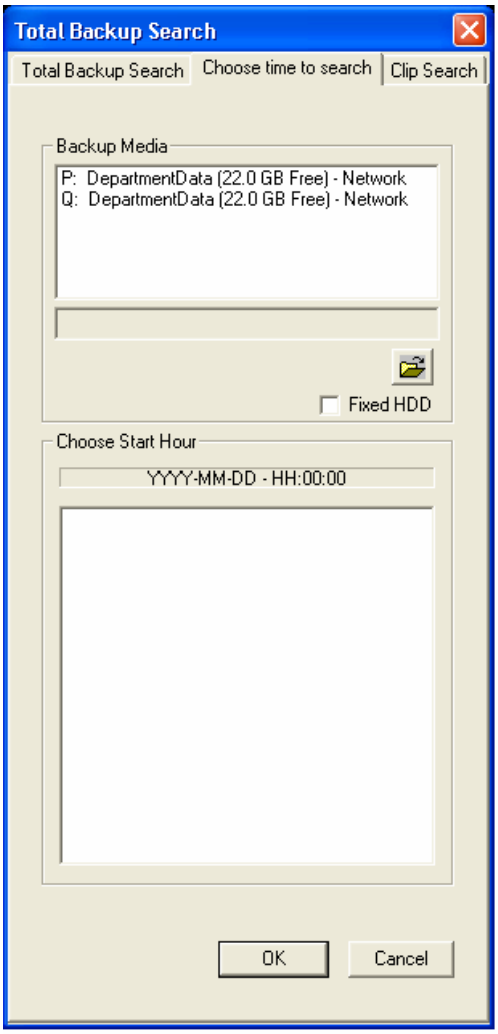
5. When the Choose Destination Location Window opens click Next.
   This will install Backup Viewer in the default destination folder.
6. Select the shortcuts to install, or uncheck all boxes for no shortcuts.
   Click Next.
7. When the InstallShield Wizard Complete window appears click Finish.
   Setup is now complete.

Loading Video from DVD or Hard Drive

1. Open the Backup Viewer program: Start > Programs > Surveillix > Backup Viewer > Backup Viewer.
2. Click the Open Button. The Total Backup Search Window will open.
3. For DVD-ROM data, select the appropriate DVD-ROM drive letter from the Backup Media Box.

   For hard drive data, select either an attached hard drive from the Backup Media Box or select the Open Folder Icon to browse to a specific directory.

   Once selected, available video data will be displayed in the Choose Start Hour Box.
4. Click on the desired time to select it.
5. Click OK.
   The video will now load into the Backup Viewer.



SCS OVERVIEW

SCS software is Network DVR Management Software; a powerful utility that allows 100 or more DVR units to be controlled using one computer. This software allows you to view live video, search saved video, edit and configure setup on each DVR, and import maps of buildings and other locations.

The SCS software was specifically designed as an enterprise software solution.

Highlights:

View Live Video from most computers

Username and Password protected

Easy to use graphical interface

Basics:

In order to log in to the XVR server, a user account must be made for each user. This ensures that only authorized personnel are allowed to log in. In addition, each user can be assigned different privileges that allow them or deny them access to different functions.

Configuring the Server for Remote Connection

1. Enter Setup on the XVR unit.
2. Click the Network Setup Button
3. Uncheck the Disable Remote Control option. You should now be allowed to adjust port settings if necessary.

NOTE: If you are using a Firewall, it may be necessary to adjust the port settings on both the XVR and the Firewall. Contact the Network Administrator for more information.

4. Click OK.
5. Make sure a User account is created. Without a user account, the Administrator account must be used.
6. The XVR server is now ready to receive incoming connections.

Connecting to an XVR

1. Refer to the Setup section of the SCS Manual for information on using the SCS Software

SOFTWARE UPGRADES

This chapter includes the following information:

- Network Recording Upgrade

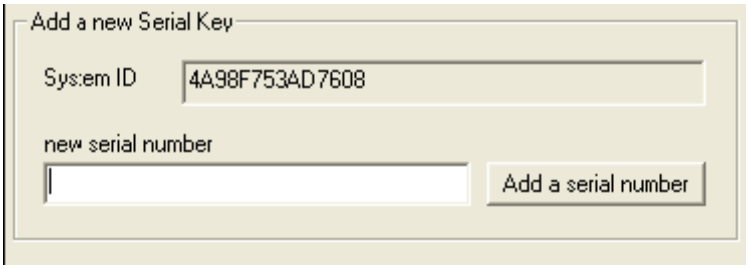
NETWORK RECORDING UPGRADE

Have the following information available before registering the HVR upgrade.

HVR Software Serial Number: That product Serial Number is the unique number that Toshiba provided with the purchase software.

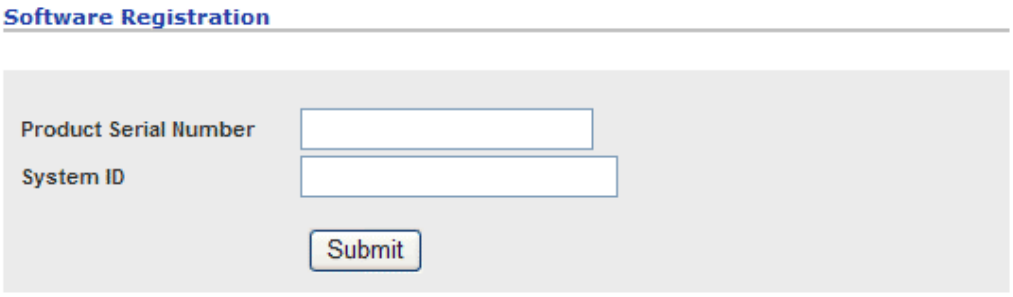
System ID: The System ID is a number that is generated by the Surveillix unit. This is a unique code generated using the MAC address of the computer running the software. The following steps illustrate how to obtain a unique System ID.

1. Enter Setup
2. Click Camera Setup
3. Click the Registration Button
4. In the Network Device Authentication, the System ID can be located under the "Add a new Serial Key" section (shown below)

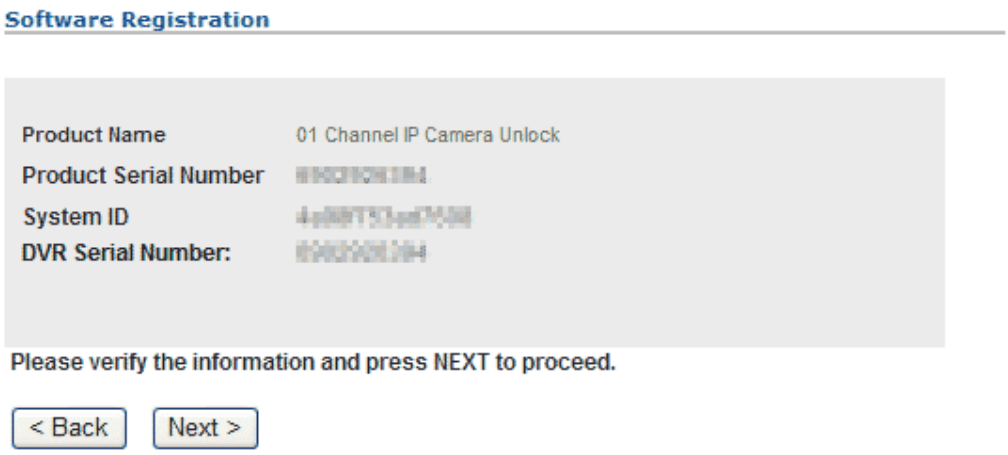


Obtaining the Unlock Code

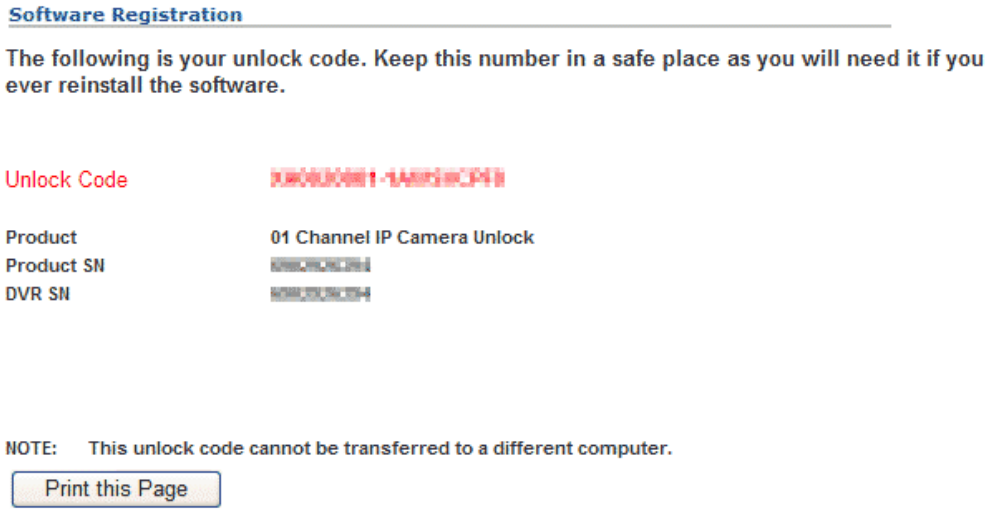
1. Open an Internet browser and go to: http://register.surveillixdvrsupport.com
2. Enter the Product Serial Number that was provided by Toshiba
3. Enter the System ID generated by the unit.
4. Click Submit



5. Verify the information
6. Click Next if the information provided is correct

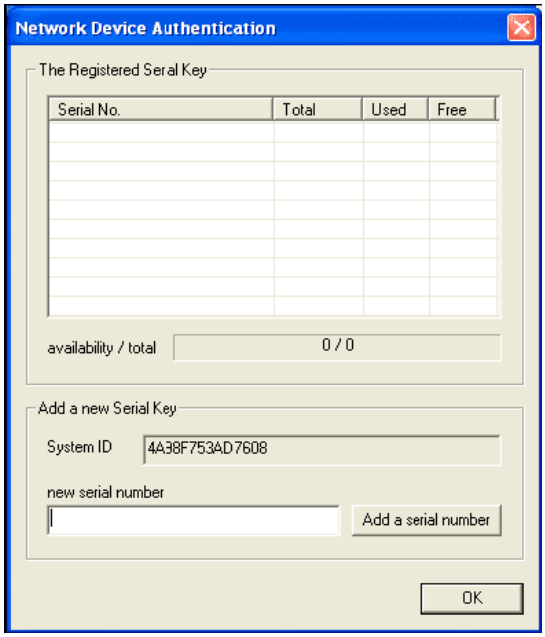


7. Once validated, the user will be provided with the Unlock Code
8. Print the page and save for later reference


Software Registration
The following is your unlock code. Keep this number in a safe place as you will need it if you ever reinstall the software.
Unlock Code
Product
01 Channel IP Camera Unlock
Product SN
DVR SN
NOTE: This unlock code cannot be transferred to a different computer.
Print this Page

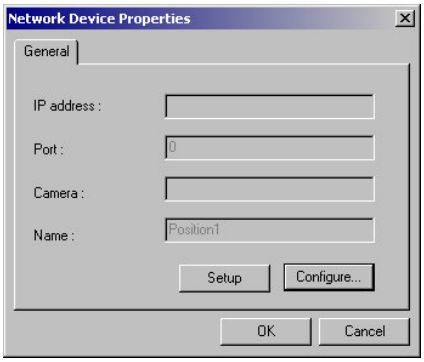
Unlocking New Network Device

1. Start the Surveillix XVR
2. Enter Setup
3. Enter Camera Setup
4. Click the Registration Button
5. Enter the Unlock Code generated by the Toshiba Registration Site into the “new serial number” field
6. Click Add a serial number
7. Once the new serial number has been added to the list, click OK

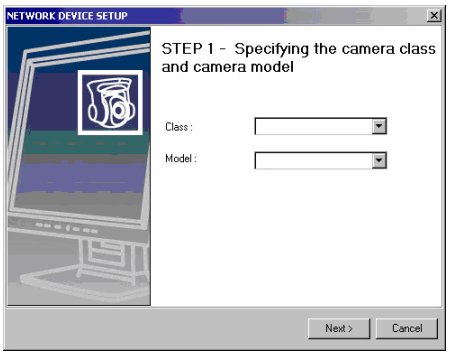


Connecting a Network Device

1. Open Camera Setup. Setup > Camera Setup
2. Select the camera channel to add a Network Device to.
3. Check the Use Network Device Box.
4. If the Network Device supports PTZ check the Enable Network Device PTZ Box.
5. Click Setup Network Device and the Network Device Properties Window will appear.



6. Click Setup to add a Network Device.
7. Select the Manufacturer (Class) and Model of camera being added then click Next.



8. Enter the IP Address, Port, ID, and Password of the Network Device and click Finish.
9. Click OK when returned to the main Network Device Propertied Window and click OK to exit the main setup window.
10. The Network Device has been added.